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RULES

OF THE

Society for the Promotion of Hellenic Studies.

1. THE objects of this Society shall be as follows:—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains, and with this view to invite travellers to communicate to the Society notes or sketches of archaeological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archaeological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, 40 Hon. Members, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read, the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President shall be elected by the Members of the Society at the Annual Meeting for a period of five years, and shall not be immediately eligible for re-election.

17. The Vice-Presidents shall be elected by the Members of the Society at the Annual Meeting for a period of one year, after which they shall be eligible for re-election.

18. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

19. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

20. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

21. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

22. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

23. Upon any vacancy in the Presidency occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

24. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

25. The names of all Candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of Candidates so proposed: no such election to be valid unless the Candidate receives the votes of the majority of those present.

26. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year; this annual subscription may be compounded for by a single payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1921, shall pay on election an entrance fee of one guinea.

27. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

28. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

29. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1; otherwise they will be held liable for the subscription for the current year.

30. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

31. The Council shall have power to nominate 40 British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

32. The Council may, at their discretion, elect for a period not exceeding five years Student-Associates, who shall be admitted to certain privileges of the Society.

33. The names of Candidates wishing to become Student-Associates shall be submitted to the Council in the manner prescribed for the Election of Members. Every Candidate shall also satisfy the Council by means of a certificate from his teacher, who must be a person occupying a recognised position in an educational body and be a Member of the Society, that he is a *bona fide* Student in subjects germane to the purposes of the Society.

34. The Annual Subscription of a Student-Associate shall be one guinea, payable and due on the 1st of January in each year. In case of non-payment the procedure prescribed for the case of a defaulting Ordinary Member shall be followed.

35. Student-Associates shall receive the Society's ordinary publications, and shall be entitled to attend the General and Ordinary Meetings, and to read in the Library. They shall not be entitled to borrow books from the Library, or to make use of the Loan Collection of Lantern Slides, or to vote at the Society's Meetings.

36. A Student-Associate may at any time pay the Member's entrance fee of one guinea, and shall forthwith become an Ordinary Member.

37. Ladies shall be eligible as Ordinary Members or Student-Associates of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members or Student-Associates.

38. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

REGULATIONS FOR THE USE OF THE LIBRARY

AT 19 BLOOMSBURY SQUARE, W.C. 1

(NOTE.—*These Regulations are under Revision.*)

I. THAT the Hellenic Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Hon. Librarian and Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Hon. Librarian, Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian, and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except at Christmas, Easter, and on Bank Holidays, the Library be accessible to Members on all week days from 10.30 A.M. to 5.30 P.M. (Saturdays, 10 A.M. to 4 P.M.), when either the Librarian, or in his absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation for August and the first week of September.

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:—

(1) That the number of volumes lent at any one time to each Member shall not exceed three; but Members belonging both to this Society and to the Roman Society may borrow *six* volumes at one time.

(2) That the time during which such book or books may be kept shall not exceed one month.

(3) That no books, except under special circumstances, be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:—

(1) That all requests for the loan of books be addressed to the Librarian.

(2) That the Librarian shall record all such requests, and lend out the books in the order of application.

(3) That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.

(4) Should a book not be returned within the period specified, the Librarian may reclaim it.

(5) All expenses of carriage to and fro shall be borne by the borrower.

(6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out except by special authority:—

(1) Unbound books.

(2) Detached plates, plans, photographs, and the like.

(3) Books considered too valuable for transmission.

(4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a payment of one shilling for each week after application has been made by the Librarian for its return; and if a book is lost the borrower be bound to replace it.

XII. That the following be the Rules defining the position and privileges of Subscribing Libraries:—

a. Libraries of Public and Educational Institutions desiring to subscribe to the *Journal* are entitled to receive the *Journal* for an annual subscription of One Guinea, without Entrance Fee, payable in January of each year, provided that official application for the privilege is made by the Librarian to the Secretary of the Society.

b. Subscribing Libraries, or the Librarians, are permitted the use of the Library and Slide Collections on the same conditions as Members.

c. A Librarian, if he so desires, may receive notices of meetings and may attend meetings, but is not entitled to vote on questions of private business.

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Applications for books and letters relating to the Photographic Collections, and Lantern Slides, should be addressed to the Librarian, at 19 Bloomsbury Square, W.C. 1.

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- Raisman, J., B.A., 14, *Carr Road, Leeds.*
- Ramann-Sastrin, V. V., *Vedaraniam, Tanjore Dt., South India.*
- Ranger, C. A., M.A., *West Downs, Winchester.*
- Ran, Arthur, *Wadham College, Oxford.*
- Rawson, Stanley W., *Cauldbeck House, Southfield Road, Middlesbrough, Yorks.*
- Raymond, Major E. H. B., D.S.O., *The Norlands, Overbury, Tewkesbury.*
- Rees, Griffith S., *Wadham College, Oxford.*
- Relton, Rev. H. Maurice, D.D., *The Vicarage, Isleworth, Middlesex.*
- Reynolds, Paul Gray, *New Bridge House, Upwell, nr. Wisbech, Norfolk.*
- Richards, Miss S. E. S., M.A., *Stockwell Training College, Stockwell Road, London, S.W.*
- Richardson, G. W., B.A., 20, *Wades Hill, Wincemore Hill, N. 21.*
- Richardson, Miss Hilda, *Newham College, Cambridge.*
- Richardson, W. K., 84, *State Street, Boston, Mass.*
- Richmond, Bruce L., 3, *Summer Place, S.W. 7.*
- Ritchie, Miss E. D., *St. Hilda's Hall, Oxford.*
- Roberts, A. Bruce, 21, *Wood Lane, Headingley, Leeds.*
- Robertson, James Boyd, B.A., 2, *Graham Road, West Kirby.*
- Robertson, Miss Mary W. U., 70, *Carden Place, Aberdeen.*
- Robins, Miss Beatrice T., *Furzedown College, Walsham Road, S.W. 17.*
- Robinson, Alfred, 10, *Wrottesley Road, Wolverhampton.*
- Roche, Eugene, 62, *Forthbridge Road, Clapham, S.W. 11.*
- Rogers, Capt. F. E., *Suisse Cottage, Newmarket, Camb.*
- Roos, Prof. Dr. A. G., *Waterholaan 4, Groningen, Holland.*
- † Rose, C. H. D., *La Rocquaise, St. Brelade's, Jersey.*
- Rowlatt, Charles James, *Elon College, Windsor.*
- Rubin, Rev. A. E., D.D., *Coltingham Rectory, Market Harborough.*
- Russell, Thomas Brownlee, *Ceylon, c/o Colonial Secretary, Colombo.*
- † Rutherford, Miss Helen, 17, *Huntly Gardens, Glasgow, W.*
- † Salisbury, F. S., M.A., *The King's School, Worcester.*
- Sargeant, George M., *Hyde Lodge, Marlborough.*
- † Scholcher, J. V., *British Museum, W.C. 1.*
- Schroder, A., *Teniersstraat 4, Amsterdam, Holland.*
- Scott, G. F., *Lywood House, Ardingly, Haywards Heath.*
- Scott, Thomas Torrance, *Bradfield College, Beds.*
- Sculy, The Rev. F. L. W., R.N., *Harmondsworth Vicarage, Middles.*
- Seltman, Chas. T., 24, *Fulbrook Road, Cambridge.*
- Shaw, Evelyn, M.V.O., 1, *Louthay Gardens, Exhibition Road, S.W. 7.*
- Shubbeare, Henry Vivian, 2, *Southwood Lane, Highgate, N. 6.*
- Sherard, Mrs. A., B.A., *Long Boyds, Cobham, Surrey.*
- Sherlock, Miss H. Travers, *The High School for Girls, Dover Street, Manchester.*
- Siblethorn, Herbert, 7, *Heathview Gardens, Rushampton.*
- Simkins, W. A., M.A., *Harnetts, Chigwell, Essex.*
- Simpson, Miss Joyce, *Somerville College, Oxford.*
- † Singer, Charles, D.M., F.S.A., *Westbury Lodge, Norham Road, Oxford.*
- Skerry, Miss D. M., 67, *Corringham Road, Golders Green, N.W. 4.*
- Slayton, Miss Marianne, 63, *Kewington Gardens Square, Baywater.*
- Slöthower, D. F., *P.L. Hoofstraat 141, Amsterdam.*
- Slyper, Dr. E., *Frederik Hendrikstraat 64, Utrecht, Holland.*
- Smijla, Dr. H., *Oude Ebbingestr., 60A, Groningen, Holland.*

- Smiley, M. T., *The University, Liverpool*.
- Smith, Alec, *Hallford, New College, Oxford*.
- Smith, George (The Master of Dulwich College), *Dulwich College, S.E.* 21.
- Smith, Miss Helen, B.A., 25, *Crescent Road, Bromley, Kent*.
- Smith, Prof. John Alexander, M.A., *Magdalen College, Oxford*.
- Snyder, Dr. G. A. S., *Kunsthistorisch Instituut der Rijks-Universiteit, Willemsvrouwenstraat 9, Utrecht, Holland*.
- Sowels, Miss G. R., *Berkhamsted School for Girls, Berkhamsted, Herts.*
- Spencer, J. E., 2, *Grove Terrace, Highgate Road, N.W.* 5.
- Spicer, R. H. S., 20, *Graham Street, Eaton-Square, S.W.* 1.
- Spokes, Mrs., 6, *St. Andrew's Place, Regent's Park, N.W.* 1.
- Squire, S. G., *Laxton House, Ousley, Northants*.
- Stanhope-Jones, Miss Editha, 87, *Cadogan Gardens, S.W.* 3.
- Stannard, Harold, M.A., 113, *Jermyn Street, S.W.* 1.
- Steed, Henry Wickham, 7, *Laundown House, Holland Park, W.* 11.
- Stephens, G. J. W., 23, *Sidney Parade Avenue, Balls Bridge, Dublin*.
- Stewart, James Cameron, M.A., 70, *Polwarth Gardens, Edinburgh*.
- Stokes, J. L., *Charterhouse, Godalming*.
- Stone, Charles Graham, *Balliol College, Oxford*.
- Stochehouse, Miss M. U., *The College, Worksop, Notts*.
- Strangways, A. H. F., 3, *King's Bench Walk, Temple, E.C.* 4.
- Street, James Martineau, *The Schools, Shrewsbury*.
- Strudwick, Miss Ethel, M.A., 13, *Marlborough Crescent, Bedford Park, W.* 4.
- Sundwall, Prof. Dr. Johannes, *Abo, Finland*.
- Sutton, Eric, *British Delegation Reparations Commission, Hotel Astoria, Champs Elysées, Paris*.
- Swallow, Canon R. D., 3, *Morpeth Mansions, S.W.* 1.
- Sydney-Turner, S. A., 37, *Great Ormond Street, London, W.C.* 1.
- Sykes, Arthur, *Ladywood Cottage, Roundhay, Leeds*.
- Symes, Harold, M.A., *Claymore School, Northwood Park, nr. Winchester*.
- Targett, A. W., M.A., *Ferncot, Winterbourne Dauntsey, Salisbury*.
- Taylor, Miss B. A., 30, *Eccleston Square, S.W.* 1.
- Taylor, Miss E. M., *The Woodlands, Daring Road, Grove Park, S.E.* 12.
- Taylor, Rev. J. Ralph S., M.A., *St. Lawrence College, Ramsgate*.
- Taylor, W. R., 86, *The Avenue, West Ealing, W.* 13.
- Tennant, B. V. A., 17, *North Street, Westminster, S.W.* 1.
- Thallon, Prof. Ida Carleton, *Fassar College, Poughkeepsie, U.S.A.*
- Thomas, Dr. Henry, *Dept. of Printed Books, British Museum, W.C.* 1.
- Thompson, Reginald Campbell, *Milburn Lodge, Boar's Hill, Oxford*.
- Thomson, Peter, c/o Black, 124, *West Graham Street, Glasgow*.
- Terney, M., M.A., *University College, Dublin*.
- Tollemache, L. de Orellana, *East Cottage, Bradfield College, Berkshire*.
- Toynbee, Miss Jocelyn, 5, *Park Crescent, Oxford*.
- Toyne, F. Herbert, 54, *Old Steine, Brighton*.
- Tressler, A. W., *The Charterhouse, Godalming*.
- Treston, H. J., M.A., 2, *Willowbrook, Western Road, Cork*.
- Tristram, The Rev. Henry, *The Oratory, Hagley Road, Edgbaston, Birmingham*.
- Turnbull, Oswald, 73, *The Crescent, Stamford Hill, N.* 10.
- Turner, G. C., *Marlborough College, Wilts*.
- Tyler, W. E., *Beaumonts House, Bridgnorth, Salop*.
- Upcott, Gilbert Charles, C.B., B.A., 37, *Southwood Avenue, Highgate, N.* 6.
- Ustin, Miss A. A., *The Grange, Rustington, Littlehampton*.
- Vere-Hodge, H. S., M.A., *Hill Side, Tonbridge, Kent*.
- Waddell, William Gillan, 1, *Stannington Avenue, Heaton, Newcastle-upon-Tyne*.

- Wade-Gery, H. F., *Wadham College, Oxford*.
 Walde, E. H. Stewart, *Chigwell School, Essex*.
 †Walker, Rev. James W., D.D., *The Vicarage, Newark-on-Trent*.
 Walkley, A. B., *Little Orchard, Brighthelmston, Essex*.
 Watt, Alfred Edward, 108, *Mill Street, Rutherglen*.
 Watt, Miss S. M., 7, *Langham Mansions, Earl's Court Square, S.W. 3*.
 West, Owen L. C., *Brathfield College, Berks*.
 Westaway, Miss K. M., *Royal Holloway College, Englefield Green, Surrey*.
 Whinyates, Miss Amy, 111, *Shannon Street, S.W. 1*.
 Whinyates, Ralph, M. C., 10, *Neville Street, S.W. 7*.
 Whitcomb, P. W., *Shawnee, Osborne Road, Walton-on-Thames*.
 White, Cyril Montgomery, *The Copse, Northwood, Middlesex*.
 White, Newport B., 20, *Eiga Road, Hereford*.
 Whitehead, Miss F., 38, *Clashhouse Road, Sheffield*.
 Wickham, Frederick, O.B.E., 1, *Montpelier Square, S.W. 7*.
 Willans, John Bancroft, *Dalforgan, Kerry, Montgomeryshire*.
 Williams, Rev. A. T. P., *Second Master's House, The College, Winchester*.
 Williams, Ernest, 12, *London Road Terrace, Carlisle*.
 Williams, L. T. M., *Lee House, 12, Dyke Road, Brighton*.
 Williams, Leonard, *The Grammar School, Wolverhampton*.
 Williams, Richard, *Grammar School, Cambridge, S. Wales*.
 Wilson, Robert, 9, *Marden Terrace, Cullercoats, Northumberland*.
 Wood, A. H., *Board of Education, Whitehall, S.W. 1*.
 Wood, Miss A. L., *Whetwright Grammar School, Dewsbury, Yorks.*
 Wood, J. R., 51, *Montgomery Street, Kelvinside N., Glasgow*.
 Woodhouse, C. A., 12, *Priory Gardens, Highgate, N. 6*.
 Worsley, Sir William H. A., Bart., B.A., *Hovingham Hall, Malton, Yorks.*
 Wyllie, Basil P., 47, *Roper Road, Canterbury*.
 Wynne, The Rev. Henry, *St. Mary's Vicarage, Poplar Avenue, Edgbaston, Birmingham*.
 Yeatman, F. D., 8, *King's Bench Walk, The Temple, E.C. 4*.
 Yeo, George Spencer, 1, *Beale Square, Stourbridge, Wores.*
 Young-Evans, J. B., *Pembroke College, Oxford*.
 †Zaharoff, Sir Basil, G.B.E., 53, *Avenue Hoche, Paris*.
 Zilliacus, Prof. Dr. Emil, *Slottsgatan 18, Helsingfors, Finland*.

ADDITIONAL LIST OF LIBRARIES SUBSCRIBING FOR THE JOURNAL OF HELLENIC STUDIES.*

The privilege of obtaining the *Journal of Hellenic Studies* on the same terms as those enjoyed by members of the Society is extended to Libraries. Applications should be made to the
SECRETARY, 19 Bloomsbury Square, W.C. 1.

* Additional since the publication of the last list in Vol. xxviii of the *Journal*.

GREAT BRITAIN AND IRELAND.

- Ampleforth.** The Library of Ampleforth Abbey, *Mutton, Yorks.*
Barnstaple. The Library of the Grammar School for Girls, *Barnstaple.*
Birmingham. The Library of King Edward's School, *Birmingham.*
 " The Library of Edgbaston High School for Girls, 32, *Hagley Road, Edgbaston, Birmingham.*
Bradford. The Library of the Grammar School, *Bradford.*
Cambridge. The Library of the Lays School, *Cambridge.*
Cheltenham. The Library of Cheltenham College, *Cheltenham.*
 " The Library of Dean Close's School, *Cheltenham.*
 " The Library of the Grammar School, *Cheltenham.*
 " The Library of the Ladies' College, *Cheltenham.*
Christ's Hospital. The Library of Christ's Hospital, *Hursham.*
Clifton. Badminton House School, *Clifton, Bristol* (Headmistress—Miss B. M. Baker).
Denstone. The Library of Denstone College, *Denstone, Staffs.*
Dublin. The Library of University College, *Dublin.*
Durham. The Library of St. Chad's College, *Durham.*
Exeter. The Library of Exeter School, *Exeter.*
Felsted. The Library of Felsted School, *Felsted, Essex.*
Glenalmond. The Library of Trinity College, *Glenalmond, Perthshire.*
Gravesend. The Library of the County School for Girls, *Gravesend, Kent.*
High Wycombe. The Library of Godstow School, *High Wycombe.*
Hull. The Library of Hymer's College, *Hull.*
Leeds. The Library of Thoresby High School for Girls, *Leeds.*
London. Dr. Williams' Library, *Gordon Square, W.C. 1.*
 " The Library of St. Olave's School, *Tower Bridge, S.E.*
 " The Library of Westfield College, *Hampstead, N.W. 3.* Miss C. S. Parker.
 " The Library of St. Paul's Girls' School, *Brook Green, Hammer-smith, W.*
 " (Blackheath), The Library of the High School for Girls, *Wemyss Road, Blackheath, S.E. 3.*
 " (Camberwell), The Library of the Mary Datchelor School for Girls, *The Grove, Camberwell, S.E.*
 " (Clapham), The Library of the Clapham High School for Girls, 63, *South Side, Clapham Common, S.W. 4.*
 " (Clapton), The Library of the County Secondary School, *Laure Place, Lower Clapton Road, E. 5.*
 " (Croydon), The Library of Croydon High School for Girls, *Wallisley Road, Croydon.*
 " (Dulwich), The Library of Dulwich College, *Dulwich, S.E.*
 " (Kentish Town), The Library of the County Secondary School, *Highgate Road, N.W. 5.*
 " (Streatham), The Library of Streatham College for Girls, 254, *High Road, Streatham, S.W.*

Newport, I. o. W., The Library of the Director of County Education, *County Hall, Newport, I. o. W.*

Oldham, The Library of Hulme Grammar School, *Oldham, Lancs.*

Oxford, The Library of Manchester College, *Oxford.*

Pendleton, The Library of Pendleton High School, *Manchester.*

Rugby, The Library of Rugby School, *Rugby.*

Rugsey, The Library of St. Anne's School, *Abbot's Bromley, Rugsey.*

Sedbergh, The Library of Sedbergh School, *Sedbergh, Yorks.*

Sheffield, The Library of King Edward VII School, *Sheffield.*

Southend, The Library of Southend-on-Sea High School for Girls, *Boston Avenue, Southend-on-Sea.*

Wakefield, The Library of the Girls' High School, *Wakefield.*

Workshop, The Library of Workshop College, *Workshop, Notts.*

York, The Library of St. Peter's School, *York.*

COLONIAL

Saskatchewan, The Library of the University of Saskatchewan, *Saskatoon, Canada.*

Vancouver, The Library of the University of British Columbia, *Vancouver, B.C.*

UNITED STATES OF AMERICA

Andover, The Library of Phillips Academy, *Brechin Hall, Andover, Mass., U.S.A.*

Carlston, The Library of Carleton College, *Northfield, Minn., U.S.A.*

Grinnell, The Library of Grinnell College, *Grinnell, Iowa, U.S.A.*

Schenectady, The Library of Union College, *Schenectady, New York, U.S.A.*

Washington, The Library of Washington and Jefferson College, *Washington, Penn., U.S.A.*

FRANCE

Dijon, La Bibliothèque de l'Université, *Dijon.*

Paris, La Bibliothèque d'Art et d'Archéologie, 16, *Rue Spontini, Paris, XVI^e.*

Strasbourg, La Bibliothèque Universitaire et régionale.

HOLLAND

The Hague, Tweede Gymnasium van's Gravenhage, *Koninginnegracht, 23, The Hague, Holland.*

LIST OF JOURNALS, &c., RECEIVED IN EXCHANGE FOR THE
JOURNAL OF HELLENIC STUDIES.

- American Journal of Archaeology (*Miss Mary H. Buckingham, 96, Chestnut Street, Boston, Mass., U.S.A.*).
- American Journal of Numismatics (*American Society of Numismatics, Broadway, and 150th Street, New York, U.S.A.*).
- American Journal of Philology (*Library of the Johns Hopkins University, Baltimore, Maryland, U.S.A.*).
- Analecta Bollandiana, Société des Bollandistes, 21, Boulevard Saint-Michel, Bruxelles.
- Annales de la Faculté des Lettres de Bordeaux (*Revue des Études Anciennes—Bulletin Hispanique. Adm. les Rédacteurs, Faculté des Lettres, L'Université Bordeaux, France*).
- Annals of Archaeology and Anthropology (*The Institute of Archaeology, 21, Abercromby Square, Liverpool*).
- Annual of the B.S.A. (*The Librarian, British School, Athens, Greece*).
- Annuario della Regia Scuola di Atene, Athens, Greece.
- Archaeologische Ephemeris, Société Archéologique, Athens, Greece.
- Archäologikum Delion (*M. Ephora, Section archéologique, Ministère de l'Enseignement, Athens*).
- Archiv für Religionswissenschaft (*The Editor, c/o B. G. Teubner, Leipzig*).
- Berliner Philologische Wochenschrift (*The Editor, c/o O. R. Reichand, Carlstrasse 20, Leipzig, Germany*).
- Bulletin de Correspondance Hellénique (*M. le Bibliothécaire, École Française, Athens*).
- Bulletin de la Société Archéologique d'Alexandrie (*M. le Secrétaire, Société Archéologique, Alexandria*).
- Bullettino della Commissione Archeologica Comunale di Roma (*III^{re}. Sig. Prof. Gatti, Museo Capitolino, Rome*).
- Byzantinische Zeitschrift (*The Editor, c/o B. G. Teubner, Leipzig, Germany*).
- Catalogue du Musée du Caire. Annales du Service des Antiquités de l'Égypte (*The Librarian, Le Musée du Caire, Cairo*).
- Classical Philology (*The Librarian, Library of the University of Chicago, U.S.A.*).
- Gazette des Beaux-Arts and Chronique des Arts (*The Editors, 106, Boulevard St. Germain, Paris, VII^e*).
- Glossa (*Prof. Dr. Kretschmer, Florianigasse, 23, Vienna*).
- Heimata (*Herr Professor Friedrich Leo, Friedländer Weg, Göttingen, Germany*).
- Jahrbuch des deutsch. archäol. Instituts (*The Secretary, Corneliusstrasse, No. 20, Berlin*).
- Jahreshefte des Österreichischen Archäologischen Instituts, Tüskentstrasse 4, Vienna).
- Journal of the Anthropological Institute, and Man, 30, Great Russell Street, W.C. 1.
- Journal of Egyptian Archaeology (*Hon. Editor, Dr. A. H. Gardiner, 9, Londonderry Road, Holland Park, W. 11*).
- Journal of Philology (*The Editor, c/o Museum of Class. Arch., Little St. Mary's, Cambridge*).
- Journal of the Royal Institute of British Architects (*The Secretary, 9, Conduit Street, W.*).
- Journal International d'Archéologie Numismatique (*M. J. N. Svoronos, Musée National, Athens*).
- Mélanges Orientales (*Les E. P. Rédacteurs, Université S. Joseph, Beyrouth, Syria*).
- Mélanges d'Histoire et d'Archéologie (*École française, Palazzo Farnese, Rome*).
- Memoirs of the American Academy in Rome (*The Librarian, American Academy, Porta San Pancrazio, Rome*).

- Memorie dell' Istituto di Bologna (Il Signor Bibliotecario, R. Accademia di Bologna, Italy).
- Mitteilungen (Athenische) (Deutsch, Archäol. Inst., Ras Phaidia, Athens).
- Mitteilungen (Römische) (Deutsch, Arch. Inst. Corneliusstrasse, 2^o, Berlin).
- Muuseum (c/o Mr. E. J. Brill, Leiden, Holland).
- Nord Jahrbücher (Herr Dr. Rehnert Liberg, c/o B. G. Teubner, Leipzig, Germany).
- Notizie degli Scavi (Il Signor Segretario, R. Accademia dei Lincei, Rome).
- Numismatic Chronicle (R. Numismatic Society, 27, Russell Square, W.C. 1).
- Philologus (The Editor, c/o Dietrich'sche Verlagshandlung, Göttingen).
- Praktika (M. le Secrétaire, La Société Archéologique, Athens).
- Proceedings of Hellenic Philological Syllagos (M. le Secrétaire, Syllagos Grae Latineae, Rue Topçilar 18, Pera, Constantinople).
- Rassegna Italiana di Lingue e Letterature classiche (Prof. Camillo Ceszi, Bassano, Padua, Italy).
- Répertoire d'Art et d'Archéologie (Bibliothèque d'Art et d'Archéologie, 16-18, Rue Spontini, Paris).
- Revue Archéologique (c/o M. E. Leroux, Éditeur, 28, Rue Bonaparte, Paris).
- Revue des Études Grecques (The Editor, 43, Rue de Lille, Paris).
- Syria (Haut Commissariat de la République Française, Service des Antiquités, Beyrouth, Syria).
- University of California Publications in Classical Philology and in American Archaeology (Exchange Department, University of California, Berkeley, Ca., U.S.A.).
- Zeitschrift für klassische Philologie (The Editor, c/o Weidmannsche Buchhandlung, Zimmerstrasse 34, Berlin, S.W.).

PROCEEDINGS

SESSION 1919-1920

During the past Session the following Papers were read at General Meetings of the Society:—

November 10th, 1919. Mr. Jay Hambidge: *Symmetry and Proportion in Greek Architecture* (see below, pp. xxxvi, f.).

December 16th, 1919. Mr. Jay Hambidge: *Symmetry in Greek Architecture*.

February 10th, 1920. Mr. E. J. Forsdyke: *A Mycenaean Head recently acquired by the British Museum* (J.H.S. xl. pp. 174-9).

May 11th, 1920. Mr. A. Hamilton Smith: *The Life of the Ancients as illustrated by Objects in the British Museum* (see below, p. xxxviii.).

July 23rd, 1920. Signor G. Bagnani: *Recent Discoveries at Benghazi (Cyrene) in Tripoli* (J.H.S. xli.).

THE ANNUAL MEETING was held at Burlington House on June 22nd, 1920. Sir Frederic Kenyon, President of the Society, took the Chair and presented the following Annual Report of the Council:—

THE Council beg leave to submit the following Report for the Session 1919-20.

The past year has been a very critical epoch in the history of the Society. At the beginning of the Session the Council was confronted with the problem of ways and means. In spite of the most rigid economy in expenditure the estimated deficit for the year 1919-20 was between £400 and £500. This was due partly to a loss of subscriptions arising from the war, but mainly to the increased cost of paper, printing and binding, of books and of photographic materials of distribution, and every form of service.

Such a deficit could be met in three ways: (1) By a drastic curtail-

ment of the Society's activities—such as the suppression of the *Journal* or the closing and sale of the Library and slide collection; (2) by doubling the subscription; (3) by a large increase in membership. The Council did not feel inclined to adopt either of the first two remedies. They felt that the only means of recovery and continuance, consonant with the Society's history and with the time, was not to double the subscription or to give less, but to double the membership and give more. The only question was how could the membership be doubled, for though the widespread enthusiasm for education is a hopeful feature of the future, a devastating wave of disbelief in the practical value of a knowledge of the ancient Greek language threatens to sweep the subject out of the curriculum of most schools. But all humanists know that no education can be complete which does not reckon with the beauty, moderation and wisdom of life which characterized ancient Hellas, and the Society can bring no better gift to the times than to widen the opportunity for profiting from the inspiration that comes from Hellenic Studies.

As a first step Mr. Macmillan wrote a letter to the *Times*, explaining the position of the Society. The most notable response was a donation of £1,000 from Sir Basil Zaharoff, who suggested that the money might be applied to meet the apprehended deficit while steps were being taken to place the Society upon a more secure financial basis. A Sub-Committee was appointed to consider and co-ordinate the various suggestions which had been received and to report to the Council. The information laid before this Sub-Committee and the experience of the officials and of those members of the Council who were most closely in touch with the rising generation all pointed to one conclusion: The Entrance Fee of Two Guineas was the great bar to recruiting new members. The Sub-Committee therefore reported in this sense to the Council, recommending a limited suspension of the Entrance Fee, and their recommendation was adopted. The amount of the Entrance Fee is fixed by Rule 26, and by Rule 38 changes in the Rules can only be made at the General Meeting held (under Rule 34) in June of each year. It was not, however, to the interest of the Society that the recruiting campaign should be postponed for six months, and the Council took the responsibility of ordering the immediate suspension of the Entrance Fee for the first 500 members elected in 1920, pending approval by the Annual Meeting in accordance with Rule 38.

In justification of their action the Council now report that 458 new members and forty-five subscribing libraries have joined the Society since January. This gratifying result is due partly to the cordial co-operation of the members, old and new, and partly to a series of carefully planned special appeals issued by the Society's Secretary, Mr. Penoyre. The Council believe that the effect of these appeals is not yet exhausted and that they may bring in more members if a further extension of time is allowed during which the Entrance Fee is suspended, though in fairness to earlier members who paid this fee, its indefinite suspension

cannot be justified. They, therefore, recommend that the Entrance Fee be suspended until December 31st, 1920, and be re-imposed at the rate of £1 1s. as from January 1st, 1921. Resolutions respecting the Council's action and the Society's future policy will be submitted to the meeting.

As a result of Sir Basil Zaharoff's generosity, and the large accession to the membership, the financial position of the Society is at present satisfactory. But the cost of everything increases daily. It is, therefore, of the first importance that the *supply of new members should be constant*, and the best service members can do the Society is to bring its work to the notice of their friends.

No new development of the Society's activities has been undertaken during the past session as the officials and staff have been very fully occupied in launching the various appeals, and in coping with the great increase in the demand for books and slides. A scheme is under consideration for a series of papers of a less technical character than those usually read at the General Meetings. It is hoped to arrange for four such papers during the next Session, two in the afternoon, and two in the evening.

The thanks of the Council are due to the following ladies who have kindly given help in the Library, in response to the Secretary's appeal for voluntary workers: Hon. Mrs. Bethell, Mrs. Culley, Miss E. A. S. Dawes, Mrs. Guy Dickins, Miss Lindsell and Mrs. Milne. The Council much regret that Mr. Penoyre's health, which suffered severely from his war-work activities, has again broken down under the strain of his exertions to replace the Society on a firm financial footing, but they have every reason to believe that he will be able to return to his post in the Autumn. His illness fortunately does not entail any curtailment of facilities for borrowing books and slides as that department is in the competent hands of the Assistant Librarian, Mr. F. Wise, who was demobilized in August, 1919.

Changes on the Council, etc.—The death roll for the past year contains the names of Dr. Edmond Warre, late Provost of Eton, of Dr. Ronald Burrows, Principal of King's College, London, of Mrs. Margaret Gibson, the distinguished student of Syriac MSS. and of Mr. F. W. Hasluck.

Dr. Burrows had been a member of the Council since 1907. The zest and enthusiasm which he brought to the study of archaeological problems makes it a matter for great regret that the many other claims on his energies obliged him of late years to put archaeological study on one side. But, as an advocate of Hellenic Studies in the widest sense, he was mainly instrumental in the foundation of the Department of Modern Greek and Byzantine Studies in the University of London, King's College, and of the Korats Chair.

Mr. F. W. Hasluck, for some years Assistant Director and Librarian

of the School at Athens, was known to readers of the *Journal*, and of the *School Annual*, by a number of studies in the by-paths of the mediæval history of Greece and Turkey based on much study of unpublished documents. He was also much attracted by the folklore of the Mohammedan religion, and its many "adoptions" from the Orthodox Church, about which he gathered much curious information during years of travel in Asia Minor, Turkey-in-Europe, and the Levant. His one published work, a *History of Cyprus*, is a model of sound and recondite learning used with good judgment.

The impending retirement of Mr. George Macmillan from the post of Honorary Secretary of the Society was announced with deep regret by the Council last year. They have now to report that the resignation took effect as from November 11th, 1919, when the Council placed on record their grateful sense of his unwearied care for the Society's best interests during his forty years tenancy of the Honorary Secretaryship. The resignation does not sever Mr. Macmillan's long official connection with the Society; as he has consented to take over the duties of Honorary Treasurer, of which Mr. Douglas Freshfield had asked to be relieved. In accepting Mr. Freshfield's resignation the Council conveyed to him, on behalf of the Society, their well-earned thanks for the consistent care given to the Society's interests in his office as Honorary Treasurer for the past twenty-two years. The Council have elected Miss C. A. Hutton to the Honorary Secretaryship in recognition of her voluntary work for the Society from 1916 to 1919.

No additions to the number of Vice-Presidents are recommended this year. Miss J. E. Harrison, a member of the Council for many years, and the Society's representative on the Committee of the School at Athens, has been compelled by pressure of other work to resign her seat on the Council. The Council accepted her resignation with regret, and have co-opted Professor Bosanquet in her place. They have co-opted the Rev. Henry Browne, S.J., Professor of Greek in the National University of Ireland, in place of Miss C. A. Hutton who vacates her seat on election as Hon. Secretary. The following members of Council who retire by rotation under Rule 18 are nominated for re-election. Lady Evans, Messrs. W. C. F. Anderson, H. I. Bell, Bosanquet, Lethaby, Myers, Wace and H. B. Walters. Messrs. Minns and Zimmern retire; and Messrs. N. H. Baynes, R. W. Livingstone, and Miss C. M. Knight are nominated for election to the Council.

General Meetings.—Four General Meetings have been held during the past Session.

At the first Meeting, held on November 10th, 1919, Mr. Jay Hambidge made a communication on "Symmetry and Proportion in Greek Architecture." There were, he said, two types of symmetry in Nature which might be serviceable to art: one was observable in the phenomena of leaf distribution, known as phyllotaxis, and in the shell. Because of

its character of balance in movement this type had been termed "dynamic." The other type was apparent in crystals, cross-sections of seed-pods, and in natural mosaic forms. Because of certain passive characteristics this type of symmetry had been termed "static." This latter type was that used, consciously or unconsciously, in design. Inasmuch as design was not possible without symmetry, it became necessary to eliminate artistic personality from design and classify such works according to the degree of technical knowledge which we found in them.

When this was done we found that the design of all nations and times fell within the "static" class except two, these two exceptions being Egypt and Greece. The design of these two peoples stood in a class distinct, and the symmetry of their design was overwhelmingly "dynamic." According to Vitruvius, the Roman architectural writer, the Greeks were careful to arrange their designs according to certain principles of symmetry, especially so their temples. They were induced to work out the principles of this symmetry when they found that the members of the human body were commensurate with the whole. Vitruvius describes this symmetry in detail, and furnishes elaborate methods for constructing buildings in the Greek style, using for that purpose certain *moduli*. He also undertook to reduce the human figure to a similar base. As no Greek building had been found which agreed with the Roman scheme, Vitruvius, to this extent at least, stood discredited. His scheme for the human figure had likewise proved useless.

The use of a *modulus* in design would automatically produce static symmetry. The Roman writer erred in assuming that "commensurability" meant measurableness of length. The present investigation showed that what was meant was commensurability of area, and consequently volume. When the figure of man, or the plant, or Greek design was measured and interpreted in terms of area, the result was a revelation.

There were three sources for the study of dynamic symmetry: the man and the plant, the five regular solids of geometry, and Greek and Egyptian art, particularly the former. We studied man and the plant to learn how the rhythmic themes of dynamic form were actually used by Nature. The five regular solids of geometry furnished us with the abstract fact of the dynamic system, and from Greek art we saw how these rhythmic themes were actually employed by masters of design. The question of consciousness or unconsciousness of use was, for the moment, unimportant. Had he the power, he would paralyse the working hand of every artist on earth and keep it paralysed until the facts of dynamic symmetry were known.

After observations from the President and Mr. Arthur Smith, it was decided to hold a further meeting at which illustrations of the application of the theories laid down by Mr. Hambidge could be shown and discussed.

An extra Meeting was therefore held on December 16th, 1919, at which Mr. Hambidge delivered his further communication on "Symmetry in Greek Architecture." After observations from Sir Cecil Smith, Mr. Anderson and Mr. Henderson, the thanks of the Meeting were tendered to Mr. Hambidge for his papers.

The third General Meeting was held on February 10th, 1920, when Mr. E. J. Forsdyke read a paper illustrated by lantern slides on "A Mycenaean Head recently acquired by the British Museum." A discussion followed in which Sir Arthur Evans, Mr. A. H. Smith, Mr. H. R. Hall, and Professor E. A. Gardner took part. The paper will be published in the forthcoming number of the *Journal*.

At the fourth Meeting, held on May 11th, 1920, Mr. Arthur Smith gave an illustrated address on the life of the ancients as illustrated by objects in the British Museum. He dealt with some of the aspects of ancient life illustrated by the recently reorganised "Exhibition of Greek and Roman Life," especially education, household accessories, and trade. He then turned to some of the subjects associated with recent events, such as treaties, corn rations, warships, and trophies of victory. In conclusion, he drew attention to the fragment of the head of Nemesis from Rhamnus. According to later Greek legend, the over-confident Persians had brought the block of marble to Marathon to fashion their trophy, and the Greeks shaped it into a figure of Nemesis, the goddess that punishes presumption. Incidentally, several recent additions to the collection were shown on the screen.

Library, Photographic and Lantern Slide Collections.—The Librarian has succeeded in completing most of the sets of foreign periodicals which fell into arrears during the war. These are now being bound and will be available next Session. In addition to these, 389 books and pamphlets have been added to the Library, mostly as the result of gifts. The Council hope to renew the Library Grant in the near future. They regret that owing to the increase in the cost of raw materials and of labour, it has been necessary to increase by 50 per cent. the prices of all slides and photographs *sold*, as from June 1st, 1920. The charge for *hire* of slides is unaltered—1d. per slide; postage is paid by the hirer.

The subjoined table shows the number of books added to the Joint Library during the past year, the number of visitors to it, and of books borrowed; also the number of slides added, of slides borrowed, and of slides and photographs sold. The corresponding figures for the last normal (pre-war) year are added for comparison, as comparison with the figures for the war-years gives no real conspectus of the use which members make of the material at their disposal. A gratifying feature of the past year's record is the number of slides which have been borrowed for use in schools.

Session.	A. LIBRARY.			B. SLIDES AND PHOTOGRAPHS.			
	Accessions.	Visitors to Library.	Books taken out.	Slides added to Collection.	Slides hired.	Slides sold to Members.	Photos sold to Members.
1913-14	442	1,072	1,087	Catalogue of 4,509 Slides.	3,746	1,681	439
1919-20	389	1,564	815	283	3,709	672	110

It will be seen that though the number of books and slides borrowed during the past year does not equal that for 1913-14, it compares very favourably with it, especially when it is remembered that there was no great revival of activity in lecturing, etc., until last October.

Among the gifts made to the Society, special interest attaches to the books and slides belonging to the late Bishop of Lincoln, presented by his widow.

The Council acknowledge with thanks books from H.M. Government of India, the Trustees of the British Museum, the Chief Secretary of the Government of Cyprus, the British Academy, the Anglo-Albanian Committee, the Metropolitan Museum of New York, the Executors of the late Miss E. P. Hawes, and the following donors: Mrs. Aldington, Messrs. J. Allan, Andreades, T. Ashby, E. Bell, Blanchet, W. H. Buckler, S. Casson, G. Curle, R. M. Dawkins, Mrs. Guy Dickins, Sir Arthur Evans, Miss Joan Evans, Messrs. G. C. Fiske, P. Foucart, W. S. George, Dr. B. Haag, Professor M. Hammarström, Mr. J. R. Harris, Miss M. A. B. Herford, Mrs. Hicks, Messrs. G. F. Hill, A. L. Humphrys, Miss C. A. Hutton, Rev. H. Gifford Johnson, Miss L. Johnson, Dr. Leaf, Mr. W. A. Lloyd, Mr. G. A. Macmillan, Sir John Marshall, Mr. J. G. Milne, Professor W. A. Oldfather, Messrs. A. S. Pease, A. G. Pearse, J. Penoyre, J. G. Phillips, Professor Rhys Roberts, Mr. F. S. Salisbury, Sir John Sandys, Mr. H. Sumner, Miss Vertue Tebbs, and Professors H. J. W. Tillyard and A. J. Toynbee.

The following publishers have also presented copies of recently published works: Messrs. Alvarez, E. Arnold, G. Bell & Sons, Berger-Levrault, B. H. Blackwell, Fratelli Bocca, Bruckmann, Burns & Oates, Cornish Bros., Jacob Dybwad, The Faith Press, Fontemoing et Cie, Heinemann, Hodder & Stoughton, Holder, Laterza e Figli, Leroux, Longmans, Macmillan, Marcus & Weber, Methuen, Spottiswoode, Ballantyne & Co., and Weidmann, the University Presses of Oxford and Cambridge, California, Chicago, Columbia, S. Dakota, Harvard, St. Joseph (Beyrouth), Princetown, and Virginia.

Mention has already been made of the gift of slides made by Mrs. Hicks. Mrs. F. W. Hasluck has also presented various negatives belonging to her husband, who was a constant and generous donor to the Society.

Finance.—The statement of accounts of the ordinary income and expenditure for the year ending December 31st, 1919, shows a deficit of £255. It must be borne in mind however that this deficit is the result of a year's work on very restricted lines. The *Journal* has been issued in one part only and expenditure in other departments severely limited. To continue on yet more restricted lines would have meant final starvation and the decision of the Council to appeal for funds to enable the work of the Society to be adequately carried on was the only alternative.

Since the accounts were made up further donations have been received to the amount of £164 to the War Emergency Fund (including £100 from Mr. W. H. Buckler) and £18 to the Endowment Fund. The Greek Government has sent a donation of £79 14s. with an intimation of its probable renewal. Members who have promised or paid increased subscriptions provide another £40 and about 45 new subscribing Libraries have been admitted.

For the success achieved the best thanks of the Council are due to the active assistance of those members who have helped so materially in various ways. To carry this success to the point where smooth waters will be reached, a continuance of these efforts is urgently necessary. The *Journal* will be issued this year in two parts as normally, and the Society is endeavouring to provide all facilities on the same scale as in pre-war days. Costs have risen so much in all directions, and particularly in the case of printing and paper for the *Journal*, that every possible effort is necessary to bring the finances of the Society once more to a satisfactory footing.

The President opened the proceedings by drawing attention to the three resolutions on the Agenda paper (see below) and asked the Hon. Treasurer to explain the circumstances under which the Council had taken the unconstitutional step of suspending a Rule without the previous sanction of the Annual Meeting.

Mr. George Macmillan, Hon. Treasurer, detailed the financial position at the end of 1919. The Council had always known that the £2 2s. Entrance Fee was a bar to membership and the justification of its suspension was to be found in the 458 new members who had joined since February of this year.

The following Resolutions were then put from the Chair, seconded by the Hon. Treasurer and carried unanimously :—

- (a) That this Meeting approves and confirms the action of the Council in suspending the Entrance Fee without previous authorisation, as required by Rule 38.

(b) That the Entrance Fee be suspended until the end of this financial year, Dec. 31st, 1920.

(c) That the Entrance Fee be £1 1s. as from Jan. 1st, 1921, and that the concluding paragraph of Rule 26 be altered as follows: "all members elected on or after January 1st, 1921, shall pay on election an entrance fee of one guinea."

The President then moved the adoption of the Report and Balance Sheet. This was seconded by Dr. Macan, who thought that considering that 458 new members had been elected in five months the Council's references to the abolition of compulsory Greek were unduly gloomy. He himself, having always advocated its abolition, believed that this would give an impetus to its study under different conditions by a different class of student, but with great enthusiasm and enjoyment.

The President announced the re-election of all Vice-Presidents and of Messrs. Anderson, Bell, Bosanquet, Lethaby, Myers, Wace, and Walters, and of Lady Evans, also the election of Messrs. Baynes and Livingstone, and of Miss Knight as Members of Council.

PRESENTATION TO MR. GEORGE MACMILLAN

The President then called on H. E. MONSIEUR GENNADIUS to speak in connection with the presentation of an illuminated address to Mr. Macmillan on his retirement from the Hon. Secretaryship after 40 years' tenure of office. Monsieur Gennadius, himself an original member of the Society, spoke of the conferences which led to its foundation in 1879, of the high professional standing of its founder-members, and of the work done in spreading knowledge of Hellenic culture in the widest sense of the word. Mr. Macmillan had been the centre of the Society's activities during all the years when it was establishing its position, and it was only right that they should give concrete expression to their feeling for him. In accordance with classical precedent they had voted him a *prosephisma*.

Dr. Leaf spoke of his pleasure in being associated with this presentation to Mr. Macmillan. Their friendship had begun from an invitation to complete a school-edition of two books of the Iliad, and had been a source of infinite pleasure to him. He then read the address as follows:—

To our friend, GEORGE MACMILLAN.

We, the friends and colleagues who have been associated with you in past years in the work of the Society for the Promotion of Hellenic Studies, desire to offer you our heartfelt thanks for the services you have rendered during the forty years through which you held the post of Honorary Secretary of the Society.

* The English text was drafted by Dr. Leaf, the Greek decree written by Mr. M. N. Tod. The address was transcribed by Mr. Graily Hewitt and bound by Messrs. Riviere. It was signed by the President, Vice-Presidents, surviving Original Members, Council, and Officials.

You were one of its founders and original members and in all its varied activities you have been the never-failing counsellor, giving ungrudgingly of the scanty leisure which falls to the lot of a successful business man.

We wish to express our regard for your high qualities, your capacity for administration, your devotion to high ideals of learning, your untiring industry, and, above all, your genial tact and consideration for the colleagues who have been happy to accept your advice and guidance in many difficulties. We assure you that we all look back upon our common work with thoughts in which affection for yourself is blended with deep respect.

Had we been actually citizens of one of those radiant Hellenic states, whose spirit we, as Hellenists and members of the Hellenic Society, strive to emulate as far as may be in a very different age, we should doubtless have voted you a crown of gold. Will you, instead, accept this, our written tribute of gratitude, goodwill and affection?

ΒΑΣΙΛΕΥΟΝΤΟΣ ΓΕΩΡΓΙΟΥ ΕΤΟΥΣ ΕΝΔΕΚΑ
ΤΟΥ ΕΔΟΞΕΤΩΙΚΟΙΝΩΤΩΝ ΠΕΡΙ ΤΑ ΕΛΛΗΝΙ
ΚΑΣ ΡΟΥΔΑΣΤΩΝ ΕΝΝΟΜΑΙ ΑΙΣ ΕΥΝΟΩΔΙ
ΕΠΕΙΔΗ ΓΕΩΡΓΙΟΣ ΑΛΕΞΑΝΔΡΟΥ ΑΝΗΡ ΑΓΑ
ΘΟΣ ΩΝ ΔΙΑΤΕΛΕΙ ΠΕΡΙ ΤΟ ΚΟΙΝΟΝ ΚΑΙ ΕΝ
ΠΑΣΙ ΤΟΙΣ ΚΑΙΡΟΙΣ ΕΧΡΕΙΑΣ ΠΑΡΕΧΕΤΑΙ ΚΑΙ
ΚΟΙΝΗ ΤΩΙΘΙΑΣΩΔΙΚΑΙΙΔΙΑΙΤΟΙΣ ΕΝ ΤΥΓΧΑ
ΝΟΥΣΙΝ ΑΥΤΩ ΤΩΝΘΙΑΣΩ ΤΩΝ ΤΗΝ ΠΑΣΑΝ
ΕΡΟΥΔΗΝ ΚΑΙ ΕΥΝΟΙΑΝ ΕΝΔΕΙΚΝΥΜΕΝΟΣ
ΚΑΙ ΓΡΑΜΜΑΤΕΥΣ ΕΧΕΙΡΟΤΟΝΗΘΕΙΣ ΚΑΛΩΣ
ΚΑΙ ΦΙΛΟΤΙΜΩΣ ΤΗΝ ΑΡΧΗΝ ΗΡΞΕΛΕΓΩΝ
ΚΑΙ ΠΡΑΤΤΩΝ ΑΕΙ ΤΑ ΒΕΛΤΙΣΤΑ ΚΑΙ ΤΩΝ ΑΛ
ΛΩΝ ΠΡΑΤΤΩΝ ΕΡΕΜΕΛΗΘΗ ΑΞΙΩΣ ΕΑΥΤΟΥ
ΚΑΙ ΤΟΥΘΙΑΣΟΥΣ ΕΡΟΥΔΗΣ ΚΑΙ ΠΡΟΘΥΜΙΑΣ
ΟΥΔΕΝΕΛΛΕΙΡΩΝ ΟΡΩΣΑΝΟΥΝ ΟΙΘΙΑΣΩ
ΤΑΙ ΦΑΙΝΟΝΤΑΙ ΤΑΣ ΑΞΙΑΣΤΙΜΑΣ ΑΠΟΔΙΔΟΝ
ΤΕΣ ΤΟΙΣ ΕΙΣ ΕΑΥΤΟΥΣ ΦΙΛΟΤΙΜΟΥΜΕΝΟΙΣ
ΑΓΑΘΗ ΤΥΧΗΙ ΔΕ ΔΟΧΘΑΙ ΤΩΙΚΟΙΝΩΙ ΕΠΑΙ
ΝΕΣ ΑΙ ΓΕΩΡΓΙΟΝ ΑΛΕΞΑΝΔΡΟΥ ΑΡΕΤΗΣ ΚΑΙ
ΚΑΛΟΚΑΓΑΘΙΑΣ ΕΝΕΚΑ ΤΗΣ ΕΙΣ ΤΟ ΚΟΙΝΟΝ
ΤΩΝΘΙΑΣΩ ΤΩΝ ΤΩΝ ΔΕ ΓΡΑΜΜΑΤΕΩΝ ΑΡΑΛΑ
ΒΟΝΤΑ ΤΟΥ ΗΦΙΣΜΑΤΟΣ ΕΑΝ ΑΓΡΑΨΑΙ ΕΙΣ ΤΑ
ΔΗΜΟΣΙΑ ΚΑΙ ΔΙΑΦΥΛΑΣΣΕΙΝ ΜΕΤΑ ΤΩΝ ΑΛ
ΛΩΝ ΓΡΑΜΜΑΤΩΝ

Mr. Macmillan in returning thanks referred to the pleasure it gave him that the two old friends who had been intimately associated with the early days of the Society, were also associated with this presentation; to their names he must add a third, that of Professor Sayce, to whose help the successful launching of the Society in 1879 was largely due. He felt quite unable to express adequately to the Society and to the speakers, his thanks for the very kind things said to him, which would be a pleasant memory for the rest of his life. The address would be treasured by him and by those who came after him.

A vote of thanks to the Hon. Auditors, Messrs. Cecil Clay and W. E. F. Macmillan, was proposed by Mr. Hayter and seconded by Miss K. Raleigh.

The President then delivered the following address on "The Outlook for Greek Studies."

The first words that I should wish to say in a Presidential address to the Society are to thank you for the great honour which you did me when you elected me to this post. To stand next in succession after the names of Lightfoot, Newton (who, though he refused the titular office, was practically President during the early years of the Society), Jebb, Gardner, Evans, Leaf, is indeed to hold a conspicuous and honourable position among the classical scholars of the country, and I wish I could think myself worthy of it. No Hellenist will forget the warning to call no man happy—till his death; but at least I can say that hitherto I have been fortunate, more fortunate than I have deserved, in the kindness that has been shown me by my superiors and by those with whom I have been associated in my work. And not least by this Society. The first distinction I received after entering on my profession at the Museum was the invitation to become a member of the Council of the Society. I have had the honour of being one of the Editors of the *Journal* for several years, and subsequently a Vice-President; and if during the last five or six years other duties, particularly those arising out of the war, have kept me from taking an active part in the Society's work, you have shown that you condoned an absence, which was in no way due to indifference, by the crowning honour which you have conferred upon me.

I have enumerated this *cursus honorum*, not, I hope, out of vanity, but because I am proud of them, and because I am grateful to you for them. I recognise that gratitude is best shown by endeavouring to justify your choice, and I hope I may be able during these next few years to place myself at the disposal of the Society, so far as I can be of service. They are likely, as I shall have occasion to say more at length in a moment, to be years of critical importance to Hellenic studies; and the cause for which this Society exists will have need of all the service which any of us can offer to it.

The events of the past year have been chronicled in the Report which has been laid before you. There are only two or three points in it on which I should wish to say a word. Of one there will be an opportunity of saying something at a later stage in this afternoon's proceedings. The second is the illness of our Librarian, Mr. Penoyre. He has broken himself down in our service, in a heroic effort to re-establish the financial position of the Society. He has made success certain in recruiting the 500 new members whom he set himself to collect; but at this cost. The best way in which we can show our appreciation of this loyal and devoted service is to maintain and continue his work, and by obtaining yet more members to assure the triumph over difficulties which he has made possible.

The third event to which I wish to refer is the death of Dr. Ronald Burrows

In him, not only has modern Greece lost perhaps the best and most active of her friends in England, but education generally, and Hellenic studies in particular, have lost one of their most vigorous champions. Burrows radiated energy wherever he went and whatever he did, and to lose him in the fulness of his powers, and when his influence was yearly becoming greater and more recognised, is indeed a tragedy. But it is not merely as a personal tribute that I have wished to make this reference to our loss. It is because the qualities which were so conspicuous in him, the qualities of faith, energy, and enthusiasm, are the qualities of which we have special need to-day: faith in a cause and in high ideals, energy to work for them, and enthusiasm to infect others with like faith and like energy.

Faith, energy, enthusiasm: those are the key-words of what I want to say this afternoon.

During the past year the outstanding event for those who are interested in Hellenic studies has not been any discovery in archaeology or literature, but the change that has come over the whole position of those studies through legislation at Oxford and Cambridge. The words "compulsory Greek" can now be uttered by a President without threatening the disruption of the Society. It matters not now whether we supported or opposed the state of things described in those terms. "Compulsory Greek," for better or for worse, has disappeared, and we have to take stock of the resultant situation. The privileged position which Greek formerly shared with mathematics is abolished. There is now much compulsory science and compulsory mathematics in the country, but no compulsory Greek: and the question for Hellenists now is, what will the effect be, and what have we to do meet the new situation?

In the first place, it is no time for despair. It has recently been my duty to visit most of the universities of Great Britain, and in connection with the Classical Association I have been brought into communication with many of those who are teaching Greek in the secondary schools of England; and one of the clearest impressions I have received is of the vigour and enthusiasm with which Greek is being taught and learnt at the present day. Never was there a more keen appreciation of the value of Greek—of its beauty in itself and of its importance as an element in the intellectual life of the country. If I thought that Greek was destined to disappear, if I thought that we in this Society were doomed to become a dwindling remnant of adherents to a lost cause, then I should indeed lose faith, not in Greek, but in our country. If we were to lose Greek, if Greek were to cease to be a widely diffused element in our intellectual culture and to become merely a study for specialists, then I am sure that our culture would fade, as a plant fades when it is severed from its roots, and we should have to wait for some new Renaissance, which would restore its vitality by once more bringing it into living connection with the most vital and stimulating source of energy that mankind has yet produced. But we are far from being obliged to face so gloomy a prospect. Greek is as vigorous to-day as it has ever been. Only we have to remember, in this connection as in others, one of the greatest lessons of the war: that faith in an ideal is the surest pledge of ultimate victory.

Greek is no longer in a privileged position. But, by compensation, it has acquired a claim on support and sympathy, which it is our duty to press. We can claim as allies those who formerly were rivals or even enemies. In all the controversies which have raged round compulsory Greek, in all the more friendly discussions which have fortunately characterised these more recent years, the value of Greek as an element of culture and education has been freely admitted by the advocates of other subjects. From the friends of history, of science, of English, of modern languages, of mathematics, we can quote emphatic and ungrudging testimony to the position of Greek as a vital and fundamental element in our civilisation, and as an incomparable instrument of education for those who are

qualified to profit by it. We have a right to appeal to that testimony now. We have a right to claim that those who recognise this value shall not deprive the country of it, or debar those who might benefit by it from receiving that benefit. We are unmuzzled now. It is our duty to be vocal in the claims of Greek, and, while not denying or minimising the claims of other subjects, to see that the republic takes no harm through any lukewarmness or deficiency in advocacy on our part.

And first we have to demand equality of opportunity. If there is to be no compulsory Greek, there must be no compulsory ignorance of Greek. We have a right to ask the Minister of Education, who is our friend, for a fulfilment of his promise that, so far his influence extends, there shall be opportunities for learning Greek in every educational area in the country, so that no boy or girl who has gifts in this direction shall be denied the possibility of developing them. We have a right to ask him, further, that nothing shall be done to bribe boys or girls away from the study of Greek by offering richer bribes or greater facilities for other subjects. We might go further, and say that the State should, in its own interest, take steps to safeguard a subject, the importance of which is admitted by all competent judges, but which lacks the popular appeal of subjects that offer a more direct and obvious material return. But we need not go so far as that. It is not favour that we need ask for, but a fair field.

I might develop this point at length. Those who are concerned with the practice of education know the special points which I have in mind, and the particular problems with which our schools are faced. But the purely educational aspect of Greek studies is rather the affair of the Classical Association than of ourselves. But there is another duty, another opportunity of serving the cause, which comes well within our functions. It is that of preaching everywhere the value of Greek. We have to remind those who have forgotten it, to inform those who never realised it, that Greek literature, Greek thought, Greek art are bone of our bone and flesh of our flesh; that English literature and English thought and English art not only open out of Greek, but are unintelligible without a knowledge of their Greek ancestors; that Greek is not a dead language but a living one; that Greek thought is nearer to us than most mediæval thought, and far more closely akin than the thought of any other nation, except (in certain respects) Rome. We ought to make people feel ashamed that they do not know Greek. If there is to be teaching of English, of history, of philosophy, of modern literature without a knowledge of Greek, people should be made to realise that it is an inferior teaching, and that the results will be inferior; that though a knowledge of English literature in itself is good, a knowledge of English literature with an appreciation of all the influence that Greek has brought to bear on it is better; that though a knowledge of modern history is good, and even essential for a properly equipped citizen, a knowledge of the Greek solutions, or attempted solutions, of problems closely akin to the political and social problems of to-day will make it better; that though modern art must be modern and not an imitation of ancient art, art which cuts itself adrift from its foundations a unstable art and will not excel. We have many friends among the teachers and students of these subjects, who know that their own knowledge and training are founded in Greek. We must ask them to help; and in helping us to help themselves.

In particular, we shall do well to press that teachers of these subjects which are, historically, rooted and grounded in Greek shall themselves be acquainted with Greek, although they do not teach it directly. In Scotland there is a most salutary provision of the Board of Education that no one shall teach Latin who has not qualified in Greek. The same rule should apply in England; and it would only be to the advantage of English studies, of modern languages, and of history, if analogous regulations were made in the case of these subjects. We cannot, of course, insist on this, but we can ask our friends whether they can really maintain

that a knowledge of Greek is not necessary for the best knowledge and the best teaching of their subjects; and, if they admit that it is, what are they going to do about it?

There is yet another point that is worth making: the sympathy and assistance which we may expect from the working classes. If anything will induce the average politician to take an interest in education or in intellectual culture in general, it will be the discovery that the working classes are asking for it; and of this there are encouraging signs. It is no doubt too much at present to expect that any large number of working class men or women will be demanding to learn the Greek language; but it is certain that an increasing number of them are showing curiosity about Greek culture, and are anxious to learn what there is in Greek thought and Greek literature. That is a demand which at any rate will not countenance an attack on Greek, and which may easily grow into a demand that Greek, and the classics generally, shall not be regarded as a preserve of the privileged classes, but shall be made accessible to the son of the working man as much as to the son of the peer. When that demand becomes effective, then the politician will sit up and take notice. Meanwhile, we can do our best to encourage it, first by supporting such institutions as the Workers' Educational Association and the Central Library for Students, which aim at putting the best information and the best books within the reach of the working man, and secondly, by doing what we can to popularise a knowledge of Greek thought, Greek history, and Greek literature, in order to stimulate the curiosity out of which the demand for a knowledge of the language will come. This latter form of activity is applicable not only to the working classes in the ordinary use of the term, but also generally to all classes that do not know Greek. The influences of Greek can, and must, be spread abroad among those who cannot read the language. Its vivifying ferment will do its work there, and will create the desire to learn Greek among many who might otherwise never have thought of it.

All this is propaganda; and propaganda is necessary in these critical days. But propaganda is not the main purpose of our Society, nor the only way in which Hellenic studies can be promoted. We have also to push forward and develop those studies themselves. We have to show that these studies are alive and that they have real work to do. And here again, there is no cause for despondency. The forty years during which our Society has existed have amply demonstrated the vitality of Hellenic studies. First archaeology, then papyrology, and now both together have widened and deepened our knowledge of Greek culture; and along with them has gone a fresher and perhaps a wider appreciation of Greek literature. Nor does either subject show the least sign of being exhausted. Prof. Grenfell has recently assured us that much of the contents of the Oxyrhynchus rubbish heaps still remains to be investigated; and has promised a volume of literary fragments for the next number of that invaluable series. Among them will be portions of Sappho and Alcaeus and new fragments of Pindar and Callimachus; an unidentified historian of Alexander; besides important theological texts and portions of extant classics.

Perhaps it is not too late to call attention also to Vol. XIII. of this series, published in the Spring of 1910, which contained some fine fragments of the Dithyrambs of Pindar, and portions of a roll which once contained certainly four, and possibly six, of the lost orations of Lysias, including three almost complete columns from the end of the speech against Hippotherses. A defence of Lycophron, perhaps by Hyperides, a dialogue of Aeschines Socraticus on Alcibiades, and a history of the Pentakontaetia are also represented, the latter being almost certainly the work of Ephorus, and valuable both as showing how closely Diodorus followed his master, and as supporting the attribution of the well-known *Hellenica Oxyrhynchica* to the same author.

Some other interesting texts from papyri have appeared in the *Sitzungsberichte* of the Berlin Academy, under the editorship of Wilamowitz, Hiller von Giertringen and Schubart. The most attractive is a fragment of Tyrtæus, the most novel a treatise on music, with examples in musical notation. But for these, and for a very full bibliography of recent papyrological publications in general, I would refer you to the excellent article by Mr. Idris Bell in the *Journal of Egyptian Archaeology* for last April (Vol. VI, Pt. 2).

Archæology also is beginning to raise its head again, now that the explorers are returning from their excursions into espionage, cattle-lifting, railway-cutting, and other similar pursuits, for which the professional *rechercheur* showed a natural aptitude when the occasion came. Greek explorers have been at work again in Crete, at Eleusis, Epidaurus, Oropus, and Alysia in Epirus. So far as can be gathered from the reports which I have seen, a large tomb of a somewhat novel kind at the latter site, and an inscription of the Achaean League at Epidaurus, appear to be the most important single items that have been brought to light. Meanwhile the Greek archaeologists have lost no time in getting to work at Smyrna and even in Constantinople; and the French have likewise been showing an active interest in the latter place. On the other hand, it is regrettable to have to record that the last act of the departing Turkish soldiers as they left Sardis was to do wanton damage to the sculptures excavated by the American expedition. Details of the extent of the damage have not yet reached me; but the fact has been entered up at the Foreign Office in the reckoning against the Turk.

For Great Britain there is plenty of work to do. We have to get our Schools at Athens and Rome going again, to supply them both with students and with funds. The main new developments arising out of the war, however, lie for us rather outside the Greek field, in Palestine and in Mesopotamia. In Mesopotamia and also at Carthage work has been resumed, without too close a consideration for the strict political proprieties, but with interesting and important results; and in Palestine a new British School has been founded, and is already getting to work in co-operation with the Palestine Exploration Fund. If the ingenious diplomacy of M. Venizelos fructifies, the blight which has rested on Cyprus by reason of an unintelligent law of antiquities may perhaps be removed; but not before much irreparable mischief has been done.

In this connection, however, I wish to refer briefly to a topic which is of some importance to us, as well as to other kindred Societies. I mean the organisation of archæological research in the East generally. The break-up of the Turkish Empire has released some of the most important areas for such research, which exist in the world, and has made various European (I wish one could add, and American) Governments responsible for their administration. It is quite clear that each such Government will be expected without delay to make adequate provision for the resumption of archæological investigations; and it will readily be understood that this gives us an unequalled opportunity for endeavouring to put research in the Near and Middle East on a satisfactory footing. At present there is great diversity in the laws of antiquities in force in different countries; and there is a great want of appreciation on the part of Government officials of the needs of archæology, and of common sense in the organisation of it. Laws of antiquities framed in haste, without practical knowledge of the subject, and under mistaken ideas of local patriotism or the protection of local interests, only injure the advance of knowledge without in any degree advancing the interests of the country in question.

For this reason, as many here present are aware, our Society has joined with all the other principal Societies in England which are interested in archæology to form a Joint Archæological Committee to deal with this and other subjects. The Committee was formed on the express invitation of the Foreign Office, the British

Academy, in pursuance of its natural function as a sort of co-ordinating machinery for the more specialised Societies, acting as the channel of communication. It has already been in correspondence with the Foreign and India Offices on the subject of archaeology in Mesopotamia, Palestine, and Egypt, and with the British representatives at the Paris Conference on the provision to be made for the control of antiquities in the countries recently separated from the Turkish Empire, and in what remains of the Turkish Empire itself. The machinery thus exists for giving effect to expert archaeological knowledge in the establishment of administrations of antiquities in these countries. What is still needed is that we should establish a full understanding with foreign scholars on the subject, and that the respective Governments should pay attention to the advice which we are in a position to give.

So far as foreign scholars are concerned, I do not think there will be any serious difficulty. I have attended two meetings of the newly founded Union Académique Internationale, at one of which the subject was formally, though briefly, discussed, while at the other it was mentioned informally. It was quite clear that the French, in particular, were ready and anxious to enter into an arrangement for full reciprocity of facilities, and there were indications that if the politicians did not oppose obstacles, the arrangement might be extended to include Persia, where France has, by an old concession, a monopoly of archaeological rights. The representatives of Greece and Italy made reservations with regard to areas which may be ceded in full ownership, and which naturally will come under the same laws as those in force in the motherland itself; but with regard to mandatory areas, no difficulty was made. By the next meeting of the Union, the time may be ripe for a formal declaration of international agreement on this important subject.

The principles of such an agreement are simple, and to an archaeologist obvious. Briefly they are these: (1) equal facilities for all nations which themselves grant equal facilities; (2) limitation of the right of excavation to qualified explorers; (3) a fair division of the proceeds of excavation between the explorer and the country of origin; (4) encouragement to natives to report finds, in place of punishment; (5) publication of results within a reasonable time. If this *régime* can be applied, and honestly administered, in districts of such importance as Egypt, Palestine, Syria, Asia Minor, Mesopotamia, and Persia, then the golden age of archaeology should have dawned, and it will only remain for us to show ourselves worthy of the opportunities thus offered for our utilisation.

In this connection I may be permitted to call attention to the little pocket-book of archaeological information and advice which has been projected by the Joint Archaeological Committee, executed by a number of experts under the editorship of Mr. G. F. Hill, and published by the Trustees of the British Museum. It is entitled, "How to Observe in Archaeology," and contains much condensed information on archaeological method in general, and on the archaeological characteristics of the various countries of the Near and Middle East. It is not intended for experts, but for the untrained traveller who is interested in archaeology; and it may also be found of value by those who study the results of excavation as they appear in museums. An appendix gives a summary of the principal laws of antiquities, and a statement of the principles advocated by the Joint Committee.

The theme of this address has been propaganda. It is a word of questionable associations, and perhaps suggests subterranean endeavours, tinged with dishonesty, to force *ex parte* statements on a credulous and unsuspecting public. That, however, to my mind is not only bad morals, but bad propaganda. The true propaganda, as we learnt during the late war, is to have a good cause, and to let it have a chance of being heard. We have a good cause and may feel confident of its triumph if it has fair play. The responsibility rests upon us for its presentation. And here the point which I wish to make is that much depends on the manner in which we

present our case. We claim that the highest kind of education, the finest form of intellectual culture, is that which is based upon Greek literature and Greek thought. Does not the responsibility then rest on us to show that it is so by our own handling of the questions, the controversies if you will, which attend these educational issues? The Greek-trained student must show Hellenic qualities of mind.

What does this involve? In the first place it involves an absence of narrowness or exclusiveness. If there is one mental quality more characteristically Hellenic than another, it is a wide receptivity, a mental alertness and curiosity, a thirst for new knowledge, a spirit of free inquiry. Therefore our advocacy of Greek studies must not be exclusive. Hippocrates and the Ionian philosophers would have repudiated intellectual kinship with those who decried the value of natural science, and Thucydides and Aristotle would assuredly have had no doubts as to the value of history. The Hellenically-minded man will welcome the advance of education in science, in mathematics, in history and in languages; and we may be quite sure that an ample recognition of the claims of these subjects will meet with a generous response. There have been narrow-minded advocates of natural science; I fear there have sometimes been narrow-minded advocates of classics. On the other hand, many of the most striking testimonies to the value of Greek have been uttered by the adherents of other subjects. Our duty and our interest alike are to join hands with the friends of intellectual culture, whatever may be the particular portion of that wide field which they cultivate. The good is one. The several facets make up the one diamond.

This is not a case in which it can be said, Your strength is to sit still. Our strength is to go forward; to go forward in the Hellenic spirit of free research, with a wide appreciation of the multifarious character of knowledge, and with the fullest sympathy for the interests of various types of mind. We have to show that a culture based upon Hellenism is more comprehensive, more generous, more tolerant, more eager for the truth, than any other; that narrow-mindedness, exclusiveness, jealousy are un-Hellenic. We have to convince the world that Greek is the inexhaustible well-spring of intellectual life.

That is the task which lies before our Society. That is the spirit in which, I trust, we shall face it in the years which lie before us.

A vote of thanks to the President for his interesting address, moved by Professor Ernest Gardner and seconded by Mr. Macmillan, was carried unanimously.

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To Debit Payable	1919	1918	1917	1916	1915
Subscription paid in advance	614	4	5		
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Emergency Fund: Library Fittings and Furniture					
Total Received	1433	20	5		
Life Compositions and Donations—					
Total at Jan. 1, 1919	1894	4	0		
Received during year	31	16	0		
Total	1925	14	0		
Less: carried to Income and Expenditure Account—Members deceased	67	5	0		
Surplus Balance at Jan. 1, 1919	1858	9	0		
Add Balance from War Emergency Fund	5	0	0		
Surplus Balance at December 31, 1919	1863	19	0		
	<u>1863</u>	<u>19</u>	<u>0</u>		

Assets.

By Cash in Hand—Bank	1919	1918	1917	1916	1915
Assistant Treasurer	63	0	3		
Petty Cash	10	2	54		
Debit Receivable	1078	8	104		
Investments (Life Compositions)	1384	3	11		
Endowment Fund	770	0	0		
Total	4154	11	11		
Less Reserved against Depreciation	100	0	0		
Total	4054	11	11		
Emergency Fund—Total Expended	406	0	0		
Valuation of Stocks of Publications	447	00	0		
Library	350	0	0		
Expenses "Strabo" carried forward	1	1	10		
Paper in hand for printing Journal	54	3	0		
	<u>4401</u>	<u>13</u>	<u>0</u>		

Examined and found correct.

(Signed) C. F. CLAY.
W. E. F. MACMILLAN.

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- Aelius Aristides.** See Waddington (W. H.).
- Aeschines.** *The Speeches of Aeschines.* With an English translation by C. D. Adams. [Loeb Class. Lib.] 8vo. 1919.
- Aeschylus.** *The Prometheus Bound of Aeschylus represented in English and explained by E. G. Harman.* 8vo. 1920.
- Allen (J. T.)** *The Greek theater of the fifth century before Christ.* [Univ. of Cal. Publ. in Class. Philol. Vol. 7.] 8vo. Berkeley, Ca. 1919.
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- Anthology.** *The Greek Anthology.* With an English translation by W. R. Paton. 5 vols. [Loeb Class. Lib.] 8vo. 1916.
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| 1491 | " " | reconstruction of door between pronaos and cella. (<i>ibid.</i> , pl. 7). |

MYCENAE

Excavations of the British School at Athens, 1920.

- | | | |
|------|--|---|
| 3362 | Map of the Mycenae district. | (Percy and Chipiez, <i>Histoire de l'art antique</i> , VI., fig. 35.) |
| 3363 | Mycenae, general view of the site. | |
| 3364 | The Acropolis, map. | (Percy and Chipiez, <i>Histoire de l'art antique</i> , VI., fig. 50.) |
| 3365 | " | from the W. |
| 3367 | " | from the N.E. |
| 1234 | " | and the Lion Gate from the S. (from a drawing). |
| 4325 | Acropolis wall from N.E. showing postern gate. | |

- 4226 Passage between Acropolis wall and wall supporting grave-circle.
 4228 **Grave-circle**, plan. (*Arch. Mus.* 1914.)
 4227 " unscriptured slabs.
 4229 " E. side showing facing slabs.
 4230 " and granary, entrance.
 4231 **Granary** to N.W. of the Lion Gate.
 4231 " $\alpha, \beta, \gamma, \delta$. Late Helladic III. vases of latest Mycenaean style with Egyptian (18th-19th dynasty) influence.
 4232 " four decorated jars of L.H. III. style.
 4231 " eighth shaft-grave beneath Eos.
 4237 " eighth shaft-grave: gold rosettes, ivory tusks and steatite bucranium pendant.
 4235 **House of Warrior-vase**, from the E., showing wall.
 4236 " " and "South House."
 4237 **South House**, from N.W.
 4234 " " the 'closed door' leading to E. room.
 4230 " " diagram showing construction of walls.
 4239 " " (a). platter from Middle Helladic burial. (b) Stirrup-vase with duck frieze of L.H. III. style.
 4247 **Palace**, plan showing position of later temple, etc.
 3392 " view from threshold of megaron into prodomos, aithousa and court.
 3392 " court and aithousa showing stairway to N. and the prodomos.
 3394 " court looking into aithousa, prodomos and megaron.
 4229 " restoration of atrioo pavement (from a drawing).
 4235 **Rhyton Well**, fragment of bull-head rhyton (drawing), with diagram showing method of inserting horns and eyeballs.
 4234 " " clay sealing (two quadripeds facing) used pillar crowned by double pair of horns of consecration; doves in field).
 4235 " " (a) vase-fragment of L.H. III. style. (b) Rhyton in *Lapis lazuli* mosaic.
 4239 **Treasury of Atreus**, the threshold.
 4240 " " threshold seen from above.
 4241 " " threshold: diagram showing construction.
 4242 " " threshold: central wedge partly (b), entirely (c) removed.
 4243 " " threshold: central wedge removed.
 4245 " " threshold and listel from interior of bank.
 4244 " " interior from fourth course to roof.
 4246 **Tomb of Clytemnestra**, interior from floor to roof.
 4236 Painted plaster, (b.) male and female aurochs, (c.) spotted bull and hand of female recumbent.
 4237 Bath coffin and vases of L.H. III. style from trenches by Lion Gate.

MISCELLANEA TOPOGRAPHICA.

- 1236 **Saesae**, temple of Apollo, Mt. Ithome in distance. (Ponten, *Griechische Landschaften*, pl. 29.)
 1237 **Chacrona**, Lion monument as restored. (Ponten, *Griechische Landschaften*, pl. 29.)
 9587 **Constantinople**, plan of the land walls. (Van Mülungen, *Byz. Comp.* pl. facing p. 41.)
 9588 " plan of the wall on the sea of Marmara. (id., pl. facing p. 269.)
 1232 **Megalopolis**, theatre. (Ponten, *Griechische Landschaften*, pl. 25.)
 1230 **Messene**, Ithome range from S.E. To r. Mt. Ithome, on saddle, Messene. (Ponten, *Griechische Landschaften*, pl. 2.)
 1232 " showing position on saddle of Ithome range, and walls. (id., pl. 2.)
 1229 **Pelraena**, harbour (r.). Zos (l.). Salamis in distance. (Ponten, *Gr. Landschaften*, pl. 108.)
 1245 **R. Styx**, at entrance to gorge of Megalopolis. (Ponten, *Gr. Landschaften*, pl. 47.)

ITALY

- 7170 *Map of the Roman world, a.d. 284—A.D. 400.* [Murray's *Class. Atlas*, pl. 2.]
- 2465 **Rome**, *Roma Urbs*, held at imp. Augustus ad Diocletian aetatem. (Kiepert and Hansen, *Formae U.R.A.*, pl. 4.)
- 1466 " " *Ima & Constantin magni ad Gregorii magni aetatem.* (ib., pl. 46.)
- B2946 " **S. Sebastiano**: general view of cemetery.
- B2947 " " interior of central tomb.
- B2948 " " another view, showing recesses for arms and for coffins.
- B2949 " " stucco-decoration in interior.
- B2950 " " painted-decoration on walls.
- B2952 " **Basilica (subterranean), near Porta Maggiore**: plan.
- B2953 " " interior seen from entrance.
- B2954 " " interior, looking towards entrance.
- B2955 " " the smaller (left) aisle.
- B2956 " " vaulted ceiling of the lantern.
- B2957 " " st., detail of stucco-decoration.
- B2958 " " st., detail of stucco-decoration (Maeonid on a panther).
- B2959 " " Great Hall: stucco-decoration of vaulted ceiling, general view.
- B2960 " " st., detail of stucco-decoration (Rape of Ganymede).
- B2961 " " st., detail of decoration (Reading lesson).
- B2962 " " st., detail of decoration (Priestess feeding sacred snake).
- B2963 " " st., detail of stucco-decoration (Winged figure in front of a thymelesterion).
- B2964 " " st., detail of stucco-decoration (Rape of Lameppidae).
- B2965 " " st., portrait head (stucco) on one of the pylons.
- 1468 **Vest.** *Roman road on the site of sixth cent. Etruscan temple.*
- 1469 " *groto in Etruscan temple position, where remains of archaic terra-cotta statues were buried.*
- 1471 " *Apella, archaic terra-cotta statue from sixth cent. Etruscan temple.*
- 1472 " *st., another view in profile.*
- 1474 " *st., head only.*
- 1475 " *Hermes, head of archaic terra-cotta statue from sixth cent. Etruscan temple.*
- 1476 " *body of stag and foot of Herakles from sixth cent. Etruscan temple.*

NORTH AFRICA

- 7157 **Cyrene**, *Plan of excavations in 1866.* (Smith and Puchet, *Dissertatio ad Cyrenae* [p. 40].)

Excavations at Benghazi (Cyrene) 1913-1919.

- 7156 **Benghazi** (Cyrene), the *Thermae* (1st century A.D.) where statues were found.
- 273 " *Alexander the Great, marble statue.*
- 280 " " " *the head.*
- 278 " *Aphrodite, marble statue, front view.*
- 272 " " *back view.*
- 281 " *Dionysos, with a panther, marble statue.*
- 247 " *Eros with a bow, marble statue, front view.*
- 287 " " *back view.*
- 288 " *head, front view.*
- 291 " *head, in profile.*
- 220 " *The Graces, marble group, front view.*
- 221 " " *back view of 220.*
- 222 " " *the heads of 220, 221.*
- 231 " " *marble group (two figures, kneeling), back view.*
- 229 " " *head of central figure of 221.*

- 953 **Banghazî Hermes**, marble statue, front view.
 998 " " " " back view.
 994 " " " the head, front view.
 997 " " " the head, in profile.
 860 " **Sotyr**, youthful, marble statue.
 850 " **Zeus**, with eagle and eagle, marble statue from Acropolis of Cyrene.
 8091 **Romeas**. Mosaic pavement (Virgil conjuring the Aeneid). [*Mos. Pav.*, vol. iv, pl. xx.]
 980 **Tripoli**. Arch of Marcus Aurelius, used as cinema.
 251 " " " " " present condition.
 252 " " " " " interior, showing adaptation of dome to square building.
 254 " " " " " exterior view of dome and roof of dome.
 227 " " " " " marble torso of Eros (?) from Turkish fortress.
 228 **Eliten**, mosaic pavement (gladiatorial armour and trophies).

ROMAN BRITAIN.

- B9337 **Boreovicus**, gateway leading to amphitheatre (?).
 B9338 **Cilurnum**, bugged courtyard, entrance gate and arched wall of peristyle (?).
 B9339 " " " a street.
 B9340 " " " granitose and gate.

SCULPTURE.

* = taken from original or adequate reproduction.

- 772 **Head*** of wooden statue ('Shoukh el Beled'), showing inserted metal eyelashes. Cairo Mus.
 1363 **Nemesis***, fragment of head of statue from temple at Bhamun. B.M.
 2149 **Polyclitus**. *Dadimona*, *Parasus* copy* (another view). B.M.
 878 **Aphrodite***. Marble statue from Banghazî, front view. Rome; Mus. Terme.
 872 " " " " " back view.
 887 **Eros with a bow***. Marble statue from Banghazî, back view.
 908 " " " " the head, front view.
 901 " " " " the head, in profile.
 787 " " " " " marble statue. Rome; Mus. Capit.
 839 " " " " " marble statue. Rome; Mus. Vat. (Collignon; *Zappes*, fig. 14).
 227 Marble torso (Eros?). Tripoli, Banghazî, Mus. Arch.
 226 **The Graces***. Marble group from Banghazî, front view.
 221 " " " " " back view.
 225 " " " " " the heads.
 221 " " " " " two figures, headless, back view.
 222 " " " " " front view of central head of 221.
 833 **Hermes***. Marble statue from Banghazî, front view.
 895 " " " " " back view.
 898 " " " " " the head, front view.
 897 " " " " " the head, in profile.
 1831 " " " " " Cast of unfinished marble statuette of fourth century type.

- 6094 **Aeschylus***, bust (full face). Florence (*J.H.S.*, xiv, pl. 11).
 6118 **Agrippina***, seated marble statue. Rome; Mus. Capit.

- 471 H. Taido, 'Warrior vase' * of correct identity.
 1210 The *Tenon Oxyptolus*. * Bonn, Mus. Conservat.
 1249 Fragment of the *Tenon Oxyptolus*. B.M.
 222 Prehellenic inscription from Louros, *J.G.* vii (18), 1 Athens, Nat. Mus. No. 13004

SUBJECTS ILLUSTRATIVE OF DAILY LIFE OF GREEKS AND ROMANS.

For a full description see the *British Museum Greek and Roman Daily Life Guide*, 2nd ed. 1925.

- 2173 Writing materials. Stylus (4), ostrakon with spelling exercise, inkjet, tablet, closed and open. B.M.
 2174 Tablet showing multiplication table and reading exercise, from a drawing.
 2086 Half a writing tablet. B.M.
 2087 Ostrakon with spelling exercise (2173), from a drawing.
 2088 Reading and writing lessons. Terracotta groups. B.M.
 2089 Reading from a scroll. Statue of Arista, aged 10. B.M.
 2090 Domestic implements: scissors (Greek and Roman), Roman thumb and needle-cases, knives. B.M.
 2234 Spinetron or spinning instrument. B.M.
 2236 Spinetron in use. Vase painting. (*Mus. J. Text* ix, pl. 47).
 2237 Vile used in spinetron. Chinese picture.
 2021 Teller objects. B.M.
 2060 Kitchen utensils: bronze. Roman. B.M.
 1827 and 6. Quack, bronze with silver inlay and ivory rings. Roman. B.M.
 2064 Lamp from Pontell, and lantern: bronze. Roman. B.M.
 2062 Toys: dolls (Greek and Egyptian), plumed mat, lead toy, bone whistle. B.M.
 2068 Toy boat from Amathus in Cyprus: terracotta. B.M.
 2060 Toy ship from Amathus in Cyprus: terracotta. B.M.
 2067 Hellenic juggler with ape and cat: terracotta lamp. Roman. B.M.
 2089 Building tools: hammer head, set squares, plummet and axes. Roman. B.M.
 2174 Slaughter from Smyrna. Roman. B.M.
 2240 Force pumps from Balaia; bronze. Roman. B.M.
 22404 " section and reconstruction.
 1829 Inscribed votive offerings to deities: bronze. Greek. B.M.
 1829 Votive relief, showing two plaits of hair dedicated to Poseidon by Philonotus and Apthentus; marble. B.M.
 2065 Argyron's helmet (Athens, 5th cent. B.C.) bronze, and inscribed ostrakon (Naucratis). B.M.
 1829 Corn-broker, 3rd cent. A.D. bronze. Roman. B.M.
 2232 Slave-badge, 4th cent. A.D. - female. Roman. B.M.
 2228 *Diploma*, given to Noh Tullius, A.D. 240; bronze. Roman. B.M.
 2230 The *Diploma* (2228) inscribed.

THE BRITISH ACADEMY

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With the view of maintaining and encouraging the study of Greek, particularly among the young, in the national interest, the late Lord Cromer founded an Annual Prize, to be administered by the British Academy, for the best Essay on any subject connected with the language, history, art, literature, or philosophy of Ancient Greece.

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2. Any such person desirous of competing must send in to the Secretary of the British Academy on or before 1 June of the year preceding the award the title of the subject proposed by him or her. The Academy may approve (with or without modification) or disapprove the subject: their decision will be intimated to the competitor as soon as possible.

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6. It is recommended that the Essays should not exceed 20,000 words, exclusive of notes. Notes should not run to an excessive length.

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The Secretary of the Academy will supply on application, to any person qualified and desirous to compete, a list of some typical subjects, for general guidance only, and without any suggestion that one or another of these subjects should be chosen, or that preference will be given to them over any other subject of a suitable nature.

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THE ORIGIN OF THE GREEK MINUSCULE HAND.

[PLATES I-III.]

I PROPOSED a question which I cannot answer. The period at which the Greek minuscule hand came into the world withdraws itself from direct evidence, and can only be approached by induction from dates apparently considerably distant. I have, however, facts to detail which do not seem to have been combined elsewhere, and which admit of a conclusion which I believe has not been drawn. And though the conclusion may not be right, the subject is of enough importance to justify a guess. With all the discoveries of papyrus and the survivals of uncial, the minuscule hand of the ninth to the sixteenth centuries is that in which we read nearly all our Greek classics, and imitated by the first printers has given us our present-day Greek type and modern Greek writing.

No tradition remained in Greece of the place, manner, or date of the origin of this hand. Of late a mistranscription of a sentence in the fourteenth century MS. Canonici graec. 23 by Cramer (*An. Ox.* iv. 400. 5) has given rise to some singular speculations (Gardthausen, *Gr. Pal.*², p. 205). The sentence runs (E. 218 v.) ἐπὶ τῇ βασιλείᾳ κυρὸ καὶ εἰρήνῃ ἐπύθηναι γράμματα κεκολλημένα χρυσῷ (χρ) μέλαν (μέ). References have been seen here to the invention of minuscule, or of stenography. It has even been proposed to alter κεκολλημένα. But ἐκκόλλεται and ἐγκολλάται are common in Byzantine writers and practically synonymous with χαράσσειν, ἐγχαράσσειν, e.g. Procopius, *Bell. Goth.* iv. 14, γράμματα ἐγκεκολλάται on the stone ship at Corcyra (= ξωθέτα below); i. 15, εἰκόνα λίθῳ ἐγκεκολλομένην; *Bell. Vand.* ii. 10, στήλαι δύο . . . γράμματα Φοινικικὰ ἐγκεκολλημένα ἔχουσαι; *Anecd.* 44. 19, ξύλῳ εἰργασμένῳ βραχὺ ἐγκολλάσαντες μωρὴν τινα γραμμάτων τεττάρων, i.e. a stamp; Theophrastus, 704. 14 (A.D. 779) a sarcophagus was discovered and ἀποσκευάσας εὗρεν ἄνδρα κείμενον καὶ γράμματα κεκολλημένα ἐν τῷ λάρνακι περιέχοντα τοῦτο κ.τ.λ.; Leo Gramin. 270-273, a coffin, ἔχουσα ἐνδοθεν γράμματα κεκολλημένα γραφέντα οὕτω; *ibid.* 198. 17, ἐπιγράφαι εἰς τὸ πρόσωπον αὐτῶν μέλαν κεκτῆτῳ; 226. 18 (= Georgius Mon. 807) κατασκευάσας καὶ ἐγκολάψας τοῖς στήθεσιν εἰς τὰς

ὄψει αὐτῶν.¹ Compare Du Cange in *καταγτόν*. The word means the cutting of incised letters on stone or wood, or tattooing the human skin. The invention ascribed to the reign of Irene by the writer in *Canonici* 23 consisted in the filling of these letters with an alloy of gold and lead. For μέλας = lead see Du Cange *in v.*, 'apud pictores μέλας dicitur Encaustum nigrum vel subnigrum, ex plumbo et argento confectum, quo cavitas scripturae repletur.' The Europolitae was presumably Michael, who let Plato, Theodore, and Joseph out of prison: *Theophanes* 769. 20. The passage continues, ἐπὶ τῆς αὐτῶν βασιλείας ἐγένετο καὶ ἡ ἐνικαία σύνοδος, ἀπὸ τοῦ τῆς στ' συνόδου μέχρι καὶ τῆς ἐβδόμης ἐπληρώθησαν χρόνοι ἑξῆς (1) ταράσιου τοῦ ἁγιοτάτου πατριάρχου. This council met A.D. 787.

I begin therefore with the oldest known minuscule MS., the Uspensky Gospels of 835: MS. No. 219 in the Petrograd Library, of which, after several poor specimens,² a good facsimile (Plate I.) has been published by Zereteli and Sobolevsky in their *Exempla*.³ I owe most of my information to the letterpress of this collection and to Zereteli's article in a Russian journal called *Στέφανος*, translated in the *Byzantische Zeitschrift* for 1900. (Zereteli quotes his compatriot Melissinski in a publication inaccessible to me.)

This hand is small and upright, elegant but not remarkably regular. It is not angular, like the next minuscule book of 861 (to judge from the tracing in Bees's article, *Revue des Etudes grecques*, 1913, 53 *seqq.*), nor massive like the Euclid, Aristotle, and Plato which we find at Patrice from 888 to 895.⁴ The writer used an elegant hand and wrote it at his ease: the impression of ease is increased by the omission of mute iota. Ligatures combine consensive letters and, what is more striking, many separate words (*e.g.* v. 3, μελέπτεσθαι, v. 5, ἀλλὰ περὶ, v. 6, ταῦτά ἐσιν; v. 7, τοσούτων). Two peculiarities are noticeable: (1) kappa has a perceptible tail which projects below the rest of the letter; (2) the ligature στ (*e.g.* col. 2, lines 7 and 8) resembles the usual ligature στ (and hence probably does not recur). In the notes (*καμῆσαι*) at the end of the book⁵ the writing is freer, and some ligatures and strokes recall papyrus (*e.g.* eta, iota, λλ).

Such a hand, though not as rapid as later minuscule, and of course much less rapid than tachygraphy, might, compared to the contemporary uncial, be thought 'wonderfully swift.' It is as it stands perfect, no essay; much minuscule must have preceded it.

This book very fortunately bears a signature, which gives us its date

¹ Cf. also *Cinarius* 25d. 10, ἄλλοι ἐγκαταστήσαντες τὴν γραφήν, *Nicetas Choni.* 41. 1, *στασις* . . . ἀρχὴν αὐτῆς ἀνακαταστήσαντες.

² *Gardthausen, Beiträge zur gr. Pal.* 1877, Taf. 2, repeated by Wattenbach and von Velheim *Exempla*, 1878, Plate 1, Zereteli, *Byz. Zeitschrift*, 1900, p. 646.

³ *Exempla codicum graecorum literis minusculis scriptorum uniuscuiusque notis instruct.*

ecum. Vol. iii. Petropolitani: Mosquae, 1813.

⁴ Nor does it particularly resemble the later ninth century products of the house of Studios, *Mosq.* 117 (ca. 880), *Paris. grec.* 1479 (ca. 890), *Mosq.* 184 (ca. 890), or *Val.* 1669 of ca. 910.

⁵ These will be found in a photograph in Zereteli's article.

and the name of its scribe, not, however, the place where it was written: I. 344v. *Ἐτελείωθη θεοῦ χάριτι ἡ ἱερὰ αὐτῇ καὶ θεοχαράματος βιβλος μηνὶ μαίῳ ζ' Ἰνδικτιώνος· ἐγ' ἔτους κόσμου 7777· ἐν ᾧ πᾶσι τοῖς ἐκτεταγμένοις μὲν μου ποιῆσθαι τοῦ γραφέντος निकολάου ἀμαρτωλοῦ μοναχοῦ ὅπως εὐρωμι· ἔλας ἐν ἡμέρᾳ κρίσεως, γένοιτο κύριε ἀμήν.* The scribe was identified by Melioranski with Nicolaus second [later] abbot of the Studium, of whom we have a life in Migne, vol. 105, on the ground that the MS. also contains the *κοιμήσεις* of three ecclesiastics who are connected with the *Στοῦδιον*.

The *κοιμήσεις* are:—

(a) *Ἐτελείωθη ἐν πῶ· ο· οσιος καὶ θεοφορος ππρ· ἡμῶν πλατων ο· του χϛ' ομολογητης ο· μεγας τοις οικουμενις φωστηρ μηνι απριλλιω δϛο· εν ξ' ημερα δευτερα.* No year is given for Plato's death, but it is computed to have occurred in 813.

(b) *Ἐτελείωθη· ο· εν αγίοις θεοδορος ο· κοινός ππρ· ἡμῶν καὶ νεος του χϛ' ομολογητης πολλούς δρομους καὶ αγωνας διανοί[=δ]σας ἐν τη ἀμώμητῳ καὶ ἀληθινῇ των χριστιανῶν πίστει· πολλούς τε φωτίσας καὶ ὁδηγήσας ἐς ἐπιγνώσιν εὐσεβείας καὶ σπῆας μῆνος μαρ[τ]ιω· ια' ινδ' 2' ἡμέρα δ' ἔτους δε· απο κτισσεως κοσμου· ζ' τλε [826].*

(c) *Ἐτελείωθη· ο· εν αγίοις ππρ· ἡμῶν· ιωσηφ· ο· αγιωτάτος αρ· επισκ· θεσσαλονικη, καὶ νεος του χϛ' ομολογουμενος ἐν καλῇ ομολογίᾳ καὶ μαρτυρίᾳ θανων ὑπερ τῆς ἀληθείας μηνι [ε'] ινδ' 1' ἔτους δε· κοσμου· ζ' τμ [831].*

The three persons named coincide with three saints of the orthodox Church: Plato, abbot of Saccudion, a monastery on Olympus, and resident in the monastery of Studius; Theodore a more celebrated polemist and hymnographer, abbot of Studius; and Joseph who, as described, was archbishop of Thessalonica and perished under Theophilus.

These people were connected: Plato was the uncle of Theodore and Joseph, who were brothers.

Seeing then that these three entries concern one a resident in the house of Studius, the next the celebrated abbot thereof, and the third his brother, there can be no doubt that the Gospel itself belonged to the Studium, was written there, and that Nicolaus, the scribe, was the second of the later abbots of Studium of that name. The hand, therefore, was the Constantinopolitan hand of the period, and Gardthausen is wrong in maintaining that the book was written in the monastery of Saint Sabas at Jerusalem, where Uspensky found and bought it—and that the hand is consequently Palestinian.

The Russian scholars are unquestionably right here. Even if these entries were copied entire from the original, it is not likely that a non-Studite scribe would have included them in a book belonging to another convent; and it is also not likely that a Studite MS. of 831 (the date of the latest entry) should have travelled to Jerusalem before 835.

We have then to regard the earliest minuscule book as the product of the *Στοῦδιον*. About this house and its inmates we have a good deal of

information. The texts have been collected by the Abbé Eugène Marin, *de Studio coenobio Constantinopolitano*, Paris, 1897, and there is an interesting sketch of the establishment in Miss Alice Gardner's *Theodore of Studium*, 1905. This place, of which the church remains, converted into a mosque, in the south-west quarter of Constantinople, was founded in 462 or 463 by a Roman, Studius, who was consul with Aetius in 454.

Suidas, *Στουδίου δυναστῆς δε καὶ τὴν περιβόητον μονὴν ἔκτισεν ἡ τῶν Στουδιῶν μονὴ πρότερον καθολικῆς ἐκκλησίας ἦν, ὑστέρον δὲ μετέβλεν εἰς μονήν. ὃ αὐτὸς Στουδίου δυναστῆς κτίζει τὸν καὶν τοῦ ἀρχιστρατηγοῦ Νικαυλαίου, ἐν ᾧ φέρονται καὶ στίχοι ἥρωικοι*

*Στουδίου ἀγλαὸν οἶκον ἐδείματο καρπαλέμος δὲ
ὦν κάμον εὐρατο μασθὼν ἐλὼν ὑπατιίδα ῥάβδον.*

He therefore built the church of St. Michael at Nacolia first, became consul in 454 in consequence of this good deed, and subsequently built the church to which his name was attached. In the chronicles the word (*Στουδίου*) is usually in the masculine. As Michael, the biographer of Theodore, says (Migne, 99, 145 A): *ἄνθρωπος τις τῶν εὐγενῶν καὶ τὰ μεγάλα δυναμένων ἀπὸ Ῥώμης ἐπακίκων, Στουδίου τῷ ἀνδρὶ ὄνομα, Εὐπρέπειον δὲ τοῦτον ἡ καθ' ἡμᾶς γλῶσσα οἶδε καλεῖν, δε καὶ τῇ τοῦ πατρικίου καὶ ὑπάρχοντος τετίμητο ἀξιώματι, οὗτος τοίνυν ἐνταυθαὶ κατεσκευηκώς καὶ πάντα τὰ αὐτοῦ διὰ μέγεθος ἀρετῆς τῷ θεῷ ἀνατεθεικώς, καὶ τὸν περιφανῆ τοῦτον σῆκον τῷ μεγάλῳ Προδρόμῳ καὶ Βαπτιστῇ ἀνιστά, μοναστῶν καταγώγων ἀπατάξας αὐτόν.*

The earliest mention of it is in the *Chronicon Paschale* for 463 (726, 18): *ἀπετίθη τὸ λείψανον αὐτοῦ [τοῦ Βίου] εἰς τὴν σκεπτόν μοναστήριον τοῦ ἁγίου Ἰωάννου τοῦ Προδρόμου καὶ Βαπτιστοῦ τὸ ἐπωνομαζόμενον τῶν Στουδίου, πλησίον τῆς Χρυσῆς Πορτῆς: cf. ib. 594, 15.*

The foundation was on a large scale; 700 monks were there under Theodore, Theophanes, 747, 10. A writer shortly before the Latin conquest (when the house was destroyed²) gives a description of it which shows it as suitable for learned leisure and rivalling Monte Cassino, or Grotta Ferrata, or the Armenian convent at Venice: *κατοικῶ τὴν σεβασμίαν τοῦ Στουδίου μονήν· οὐδεὶς τῶν βαρβάρων ἀνθρώπων εἰς πρόσωπόν με ὄρῃ, οὐδὲ τῆς φωνῆς μου ἡνὴν ἀκούει· καὶ τὸ αἶτιον ὅτι χίλια ἔτη ἄφ' οὗ ἀνὴρ ἄπρακτος οἶκα εἰσῆλθεν εἰς τὴν μονὴν τῶν Στουδίου, οὐδὲ θῆκεν γένος τὴν αὐτὴν ταύτης ἐπίτησιν. διὰ γὰρ ἐν κέλλῃ παλατίῳ ὁμοίᾳ κήποι καὶ παραδείσοι ἐλαιῶν καὶ ἡμπέδων κύκλωθέν μου, ἡμέροι κυνάρισσοι καὶ εὐθαλεῖ ἐμπροσθέν μου, εὐθὺν ἡ πόλις καὶ ἡ ἀγορά, ἐκείθεν ἡ μητὴρ τῶν ἐκκλησιῶν καὶ ἡ βασιλεία τοῦ κόσμου. The only thing he omits is the view of the Bosphorus³ (Joseph Bryennius, quoted in Byzantios, ἡ Κωνσταντινούπολις, περιγραφή τότε*

² But afterwards restored, Nicephorus Gregorius I, 160, 16.

³ The monastery continued to be one of the most important in Constantinople. Here

Isaac and John Cammenus were educated (Nicephorus Bryennius 18, 12) and here Isaac retired to die (Michael Attalides, 67).

γραφικῇ etc., Athens, 1851, vol. i. p. 308—no doubt from the edition of Joseph Bryennius's work by Bulgarius, Leipzig, 1768-84, which I have not seen.)

The foundation came early into the hands of the 'Λαοίμεγτος.'² This order is heard of at least as early as 491 (Theophanes, 219. 5). They always included in their rule the occupation of writing books. S. Marcellus, archimandrita (29 December) is said to have made his living by copying books: There are, however, few mentions of them in the fifth, sixth, and seventh centuries. The brethren, as Marin says, were preparing themselves in silence for the warfare of the eighth century. Here they defended the orthodox faith against the iconoclasts, and mention of their abbots is frequent in the chroniclers.³ In 773, with the other monks of C'pal, they were expelled by Constantine Copronymus. But better days were not long in coming, if the emperors were at best lukewarm down to Basil the Macedonian: we find the names of Sabbas, abbot of Studium, and Plato, abbot of Saccudion, appended to the acts of the synod which restored images in 787.

The rules of the house under Theodore have been preserved, and were published by Mai from two MSS., Vat. 430, f. 20, and Ottob. 350, f. 14 (*Patrum novæ bibliotheca*, v. 83 *μη.*, 1840)⁴; they are headed τοῦ ὁσίου πατρὸς ἡμῶν καὶ ὁμολογητοῦ θεοδώρου ἡγουμένου τῶν Στουδίου ἐπιτίμια κοινὰ τῆς ὅλης ἀδελφότητος ἐπὶ τῶν παραλειπόντων ἐν τῇ ἐκκλησίᾳ εἰς τὸν καινόν. After regulations περὶ τοῦ κελλαρίτου, τοῦ ὀψοῦμοῦ, τοῦ βιβλιοφύλακος, τοῦ σκυτίως *uo* siml (*υγ-ξ*) περὶ τοῦ καλλιγράφου.

αγ. εἴν ὑπὲρ τὴν χροίαν ποιῶν κόλλαν σήπη αὐτὴν διὰ τῆς ἀπομονῆς μετανοοιαι ν'.

βη. εἴν μὴ φιλοκαλῶς κρατῇ τὰ τετραῖδιον, καὶ τίθησιν τὰ ἀφ' οὗ γράφει βιβλίον, καὶ σκέπει ἐν καιρῷ ἑκάτερα, καὶ παρατηρεῖται τὰ τε ἀντίστιχα καὶ τοὺς τόκους καὶ τὰς στιγμὰς, ἀπὸ μετανοίας λ' καὶ ρ'.

γδ. εἴν τις ἐκατηθήσει ἐκ τῶν γεγραμμένων τοῦ ἐξ οὗ γράφει βιβλίον, ξηροφαγείτω.

νη. εἴν τις πλεον τῶν γεγραμμένων ἀναγνώσει ἐξ οὗ γράφει βιβλίον, ξηροφαγείτω.

οξ. εἰ ἐκ θυμοῦ συντρέψει κάλαμον, μετανοοιαι λ'.

ση. εἰ ἐπύρην ἑτέρον ἐτέρου τετραῖδιον ἀνευ γνώμης τοῦ γράφοντος μετανοοιαι ν'.

υθ. εἰ μὴ στοιχεῖη τοῖς τετυπωμένοις παρὰ τοῦ πρώτου καλλιγράφου, ἀφοριζέσθω ἡμέραι δύο.

ξ. εἴν ὁ πρωτοκαλλιγράφος ἐμπαθῶς διατέμῃ τὰ ἐργόχειρα, καὶ εἰ μὴ περιστέλλῃ καλῶς τὰς βερβάνικας καὶ πάντα τὰ ἀμφιαστικά ἔργαλαία, ὥστε μὴτι ἀχρειωθῆναι τῶν χρησιμωτάτων εἰς τὴν τοιαύτην διακονίαν, ἀπὸ μετανοίας ν' καὶ ρ' καὶ ἀφορισμοὶ ἐπιτίμησον.

[μετανοοιαι, penances, consist of more or less complete prostrations and genuflexions.]

² εφ' ᾧ αὐτὸς ἔειπεν (465) καὶ Σαυῖνος τὸν αὐτοῦ ἐκτίσειν τοῦ Πισκοποῦ, καὶ κοινὰ εἶναι ἐν τῇ κοινῇ τῶν Ἀσκητῶν ἐν αὐτῇ κατέστησεν, Theophanes, 176. 3.

³ Cf. e.g. Theodore's reply to Leo Armeniacus, Georgius Monachus, 767 = Symeon, 608.

⁴ Reprinted in Migne.

These very detailed regulations, and also those relating to the Librarian, imply that the copying of books had been for a long time a regular part of monastic life among the monks of Studium. Taking the other statements together with them we may fairly suppose the writing of books had been carried on there since the foundation. Theodore will have revised the practice obtaining before the persecution of Copronymus.

But so far we do not know what hand was in use there; there is nothing to show that Studite books down to 800 were not all in the uncial of the period.

Our further knowledge is due to the amiable habit the Studites had of writing *logoi* and obituaries of each other. Theodore wrote a life of his uncle, Plato; there are two versions of a life of Theodore bearing the name Michael (in Migne, vol. 95), and there is an anonymous life of his successor Nicolaus, the writer of the Uspensky Gospels (Migne, vol. 105).

All these three generations of the eighth and ninth century took an interest in the scriptorial department of the monastery. Theodore says of his uncle:—

814n. οὐ γὰρ ἐπειδὴ εὐγενὴς τὸ κατὰ σῶμα, ἀπετραχύνετο τοῖς ἀγροικοτέροις συνδιατιώμενος . . . τοιγαυτοῦν καὶ κόπροι ἐπὶ ὤμων ἐπεφέρετο καὶ χῶρον ἀρδεῖν προσετίττετο καὶ ἄλευρα φύρειν ἠνάιχετο καὶ ταῦτα μετὰ τοῦ γράφειν τὸν χρόνον πολλῶς καὶ ἐπιμελεῖα κρατίστη.

818D. χειρῶν ἐργασία διὰ σπουδῆς· τοῦτο γὰρ τῶν ἐκείνου κατορθωμάτων παρὰ τοῖς πολλοῖς ἵνα μὴ λέγω τοὺς πάντας, τὸ ἐπίσημον, ἢ μᾶλλον, οἰκειότερον εἰπεῖν, σὺν τῇ ἀγίῳ ἀποστόλῃ φάναι [Acts xx, 34] αὐτοὶ γινώσκετε ὅτι ταῖς χερσίν μου καὶ τοῖς οὖσι μετ' ἐμοῦ ὑπηρετήσαν αἱ χεῖρες αὐταί. ποῖα γὰρ χεὶρ τῆς ἐκείνου δεξιᾶς μουσικώτερον ἐσυρματιστογράφησεν, ἢ τίς ἐπιπονώτερον τῆς ἐκείνου προθυμίας ἐσπουδαῖα ἡράφησεν; καὶ πᾶν ὅτιον προὔπεσεν ἔργον θερμῶς διεχειρίσατο. πῶς ἂν τις ἐξαριθμήσῃ τοὺς τὰ ἐκείνου πανήματα, εἴτ' οὖν βιβλίδια ἔχοντας ἐκ διαφόρων θέλων πατέρων ἀεθολογηθέντα καὶ ἱκανῇ πορίζομενα τοῖς κεκτημένοι τὴν ὠφελείαν; ταῖς καθ' ἡμᾶς δὲ μοναῖς πάσιν ἄλλοθεν ἢ τῶν δέλτων εὐπόρια; ἢ οὐχὶ ἐκ τῶν ἐκείνου ἁγίων χειρῶν καὶ πόνοι; ὥς οἱ μετιώντες καὶ τὴν ψυχὴν φατιζόμεθα, καὶ τὴν γραφίδα θαυμάζομεν ὅποια τε καὶ ἥλικη.

Plato produced a great deal with his own pen, especially *Catene* of the Fathers, and the next generation counted many of his books in their libraries. His pen was remarkable both for its abundance and its character. The character is denoted apparently by the epithet *ἐσυρματιστογράφησεν*, the meaning of which we must leave till its next occurrence.

Of Theodore it is said (*vita* A, 152 B):—

μνημονεύων δὲ αἰ τοῦ μακαρίου Παύλου εἰρηκότος ὅτι δωρεὰν ἄρτων οὐκ ἔφαγον ἀλλ' αἱ χεῖρες αὐταὶ ἐμοὶ καὶ τοῖς σὺν ἐμοὶ διηκόησαν [as before], ἐργάζεσθαι· καὶ αὐτὸς ἠθέλει, πάντοτε τὰς χεῖρας ταῖς δέλτοις κινῶν καὶ τὸν ἴδιον κόπον τοῖς ἐργοχείροις συνισφύρων τῶν μαθητῶν. ἐξ ὧν καὶ τινὰ τῶν βιβλίων ἐτι μένουσι παρ' ἡμῶν τῆς αὐτοχείρου γραφῆς κάλλιστα ὅσα πανήματα.

Fate has denied us the possession of any of the works of the hands of Plato and his nephew.

Theodore was followed by Nicolaus: he in his turn has an obituary, and although the terms relating to his hand were borrowed from the oration on Plato (as these obituaries evidently utilised much common form, cf. that on Theodore above), the fact that we have two specimens of his work, the Uspensky Gospels and Coislin 269, ff. 97-286, enables us to interpret the terms:—

καὶ γοῦν πρὸς τῇ ἐμπράκτῳ πολιτείᾳ τε καὶ διαγωγῇ οὐδὲ τῇ ἐν τῶν ἔργων κοινωνίᾳ τοῖς ἀδελφοῖν ἐπίσης ἀπελιμπάνετο· ἀλλ' ἦν ταῖς χερσὶ κοπιῶν καὶ ἐλάττους ἄριστα συνρμεογραφεῖν· αἱ καὶ τις ἄλλος οἶμαι τῇ ὡκυτῆτι χειρῶν τὸν Ἀσαήλ ἐκείνον ἐπὶ τῇ τῶν ποδῶν ἐξισομένοιο καὶ μαρτυροῦσιν αἱ τοὶ βιβλοὶ καὶ τὰ ἐκείνου ποιήματα.

We find, therefore, here that *συνρμεογραφεῖν* and *speed* (ὡκυτῆς) are predicated of the same hand; no one can write uncial Slavonic or other fast; it is essentially a type of hand that demands deliberation (*σπουδή*) and time. The strokes are long and finished in an artificial manner.

On the other hand, we can hardly suppose that Plato and Nicolaus wrote tachygraphy; excerpts from the Fathers and Gospel-books were not so large as to require stenography.

The metaphor contained in *συνρμ-* or *συνρμαιογραφεῖν* is uncertain. *Συνρμος*, in the classical writers, is applied to what Liddell and Scott call 'any lengthened sweeping motion,' but not to writing. *Συνρμαία*, which is nearest in point of form, and old, is no doubt a derivative. In Byzantine usage *σῶμα* and its derivatives meant 'cloth' or 'web,' often of cloth of gold and the like. See Du Cange in *Σῶμα*, *Συνρματίνος*, etc. That is to say, something drawn out or weaved. The precious metals are not necessarily implied. Applied to writing we find *ἐπισῶρεν* among Anna Comnena's phrases 'to drag the pen,' i. 74, 19, *πρὸς λόχον ἐπισῶρεν τὸν κάλαμον*; ii. 200, 3, *πρὸς λόχον ἄφας τὸν κάλαμον ἐπισῶρεντα*. Rather nearer is Stephanus' quotation from Lucian, *diol. meretr. v. 3*, τὰ γράμματα οὐ πᾶν σαφῆ ἀλλ' ἐπισῶρμμένα, δηλοῦντα ἐπυξίε τινα τοῦ γραμματίου. This word can only mean 'dragged along,' i.e. many letters written with one stroke, what we usually call ligatured. This, says Lucian, betokens haste on the part of the writer, and Nicolaus' *συνρμαιογραφία* is, as we see, another way of describing his speed. His hand, then, and that of his predecessors combined continuity, like that of a web or cloth, for instance, cloth of gold, with speed. This can only apply to the new book-hand, compared to uncial ligatured and fast. The Uspensky Gospels, compared to contemporary uncial, present this character.

We therefore conclude that both Plato and Nicolaus wrote minuscule as we see the latter did, and that the hand was not so familiar as not to be admired for its speed. This hand will have been in existence by the middle of the eighth century. For if Plato died at the age of seventy-nine in 813, and was therefore born in 733, and we may be sure that he furnished his task of writing like other monks and scholars (e.g. Photius in the next

century) when he was a young man before he was called to government and controversy, we see him writing his *συμμειρογραφία* between 750 and 760, and there is no reason to suppose that he invented his hand.

This is as far as inference from the first minuscule book, and the lives of the Studites, enables us to take back the minuscule hand. The question next arises from what earlier type of hand was the minuscule of the eighth century derived? The nearest hand in point of time is the cursive of the papyri found at Aphroditopolis, the modern Afrodito. These were written at the beginning of the eighth century, and therefore after the Arab conquest of Egypt and not much more than a generation before S. Plato's labours began. Specimens have been published in the Atlas of the British Museum Catalogue (vol. iii, 1907, plates 96-100), the New Palaeographical Society, series i, plates 76, 152, 153; and two small pieces (one from Afrodito, pap. 1448 = New Pap. Soc. 152, and one acquired earlier, pap. 32) are given in Sir E. Maunde Thompson's *Introduction* facs. 41 and 42. Mr. H. I. Bell has with great kindness allowed me to inspect a selection from the unfacsimiled Afrodito papyri.

The hands seem to me to fall into pointed and round, and the latter (e.g. pap. 32 and a vellum scrap, pap. 116 B) look more like minuscule at first sight. The hand is nearest in time to minuscule, and undoubtedly resembles it more closely than any other known hand. It is maintained e.g. in the manuals of Maunde Thompson and Gardthausen, that it is the direct parent of minuscule. This I doubt; on the ground that if we are now able to put minuscule back to A.D. 750, there does not seem sufficient time allowed for the papyrus cursive to develop into the minuscule book-hand (which I take, considering the slow rate of usual minuscule-change, and the similarity of the description given of Plato's and Nicolaus' hands, to have been materially the same in 750 and 835).

To anyone familiar with minuscule books it would appear that the Afrodito hand and the hand of the Uspensky Gospels are altogether unlike, and that the dashing papyrus hand, with its enormous tails and hooks, and the neat prim letters of Nicolaus, are at opposite poles. Similarity and dissimilarity no doubt are subjective matters, and for a balanced judgment an observer probably is wanted equally at home with papyrus and minuscule. The question at issue is whether the hand of 700-710 could have developed into one resembling the hand of the Uspensky Gospels in about forty years. To me, even when we imagine the tails or storks' legs cut off and the sweeping hand regulated and stylised to suit a small page, this seems very unlikely. The elements of the letters are of course the same, but there are many divergencies in the formation. The points of difference which strike an eye accustomed to minuscule are the following. I quote from pap. 1448 (Plate II.).

1. The enormous upward and downward strokes attached to lambda, hooked in the case of iota, mu, rho, phi; the tall upstrokes of eta and kappa. These tails, which Gardthausen compares to storks' legs, needed to be

pruned and dropped if the hand was transferred from scrawling documents with unbounded material to the production of books with a small limited page.

2. On the other hand two letters which in minuscule have tails, viz. gamma and nu, in this specimen of the Afrodito hand do not descend below the line. In minuscule gamma has the longest tail of any letter; nu is assimilated to mu, and adopts its tail.

3. In the Afrodito hand we notice a very small delta, resembling a minuscule semi-uncial alpha. The minuscule delta allows itself considerable scope, and soon expands into a kind of balloon. Omega in early minuscule is usually closed.

4. The open signum of papyrus altogether disappears, and is wholly strange to minuscule, in which it would suggest a tachygraphical epsilon. This is perhaps the strangest point to a mediaevalist in these papyrus hands.

5. The common minuscule ligatures for *ei* and *oe* are in the papyrus hand, but that for *ou* is differently formed; the right-hand stroke is straight. (This begat the form which I have found in Coislin 120.)

In another published specimen of these hands (Pal. Soc. n. 153, papyrus B.M. 1448) we find enormous tails. In minuscule tau is a short letter, and the long tail remains only in the ligature $\tau\tau$ found in early minuscule. Gamma in these papyri has its exact minuscule form, but its downstroke in the papyri is short compared to those of rho and tau. Nu in the papyri has the modern printing form, which minuscule never develops. Pi shows a form quite different from minuscule, and the common ligature for $\sigma\tau$ is open. The specimen of pap. 32 (Maunde Thompson, No. 42 reduced) is nearer minuscule, inasmuch as the letters are rounded. It has, however, most of the differences I have noted, including open sigma and a sprawling nu, and is on a very large scale.

Accordingly, I conclude that the Studite hand of 835 and its predecessor of 750-760 are not the direct descendant of the Afrodito hand of 710, but are the development of an earlier stage of papyrus-cursive. And that this is not merely personal impression may appear from further evidence. We have what appears to be an example of a papyrus-hand directly adapted to books in the Sinaitic minuscule to which we proceed. This hand is entirely unlike that of the Uspensky Gospels. If the Afrodito-hand had been adapted, within about fifty years, to book-writing, it must have produced something like the difficult Sinaitic script in which papyrus characteristics remain unchanged. The Studite *supraascriptura* would appear to be the fruit of a longer development from an older hand.

The actual minuscule hand did not establish itself without a struggle. An attempt was made in the eighth or ninth century to adapt the cursive papyrus-hand, in use for documents, directly to books. We have four specimens of books in this hand:

1. Petrograd cod. Uspensky I. A small book on vellum. A facsimile in Gardthausen, *Beiträge z. gr. Pal.* 1877, Taf. 1.

2. Sinai No. 591, on vellum. A tracing in Gardthausen, *Mélanges Græcs*, p. 733.

3. Sinai No. 824 on paper.

4. Vaticanus: 2200 (Colonna 39) on paper. Facsimiles in Pitra, *Analecta Sacra*, ii. 1888, Palaeographical Society ii. 126 (small pieces in Maunde Thompson and Gardthausen), and in Cavalieri-Lietzmann, No. 3 (reduced). I reproduce one of the pages given by the Palaeographical Society (Plate III.)

This singular book measures about 265 × 150 mm., is arranged in quaternions ruled only on the inside of the central sheet, and is on thick brown fibrous paper. It contains the *Doctrina Patrum* (ed. Diskamp). On f. 410 it has a glossary *περὶ δυσνοήτων λέξεων καὶ ὀνομάτων* beginning *αὐλαία αἱ κόρτινα* (*sic*), f. 412 a list of *σημεῖα* or abbreviations. These are partly hieroglyphic, as: *οὐρανός*, *γῆ*, *θάλασσα*, *ποταμός*, and alphabetic such as *ὄνομα*, *ὀνόματα*, *ἐστίν*, etc. The hand, though it may be called handsome, is so difficult as to defy any expert at first sight. The difficulty is due to the compression of its large character; the ligatures are excessive, and too many letters are like one another. Its principal fault is that it takes too much room. The letters of one line run into those of the next. Hence most accents and breathings are omitted. The characteristics are taken directly from papyrus, i.e. the tall eta with a shoulder, the cursive nu, the open sigma, and the extraordinary ligatures, like a rearing horse, entirely foreign to minuscule, *rex* and *tois*. The waste of space and the want of clearness compared to the uncial bookhand (which survived) were probably fatal to this hand. There is no trace of it after the ninth century at latest. The origin of the book is unknown beyond the Colonna collection. The other three point to the East. The Petragrad book is said to have come from Athos and was probably not original there; the other two are at Sinai. The material (paper in two cases), three hundred years earlier than elsewhere in the West, points the same way. None of the examples are dated. I am told that Vat 2200 need not be later than the eighth century. We seem to have an attempt of eastern, perhaps Sinaitic, monks to supersede uncial by a direct adaptation of contemporary cursiva.¹⁹

The result of the direct unmodified transference of a papyrus-hand to books appears to have been this remarkable hand. We may argue that if the *Afrodito* hand of 700-710 had been used for books in 750 it would have given a hand of similar confusion and intricacy. As the earliest minuscule is a perfect unexperimental hand, differing *toto caelo* from anything earlier that can be produced, I conjecture that it descended, through a period of a hundred years, from a different cursive, perhaps more upright. This may have been Constantinopolitan. The specimens of papyrus which we possess are, naturally, Egyptian, and there seems no reason why Byzantine

¹⁹ The marginalia of the Codex Bezae, which more or less resemble this hand, have been referred along with the whole MS. to the Greek East by Dr. Löw (*Journ. Theol. Stud.* 1913, xiv. 385, 399.)

cursive, used on vellum as well as on papyrus, should have been identical with Egyptian. Further, a period may be suggested for the application of Byzantine cursive to books and for the development of the other characteristics of Byzantine books, namely, for the extinction of the roll, the exclusive use of the book-form, and the habit of always utilising both sides of the page. What induced the world of Constantinople during the Isaurian monarchy to give up the use of papyrus, to write books on vellum only, in book-form, on both sides of a page, and in a small hand which allowed the most to be made of the space?

The Afrodito papyri and also the youth of Plato fall within the latter part of the period which is sometimes called the Byzantine Dark Age, and extended roughly speaking from Heraclius to Irene. I do not think that Heraclius and his successors, or the Isaurian house, intentionally neglected or destroyed ancient literature, but it was in their period that it perished. In the day of the last Neoplatonists and of Stephanus of Byzantium it was extant in practically undiminished volume. When the images had been restored and the Revival began in Photius' day there were only fragments. Accordingly the end of the heathen world, which may be marked by Justinian's closing of the Athenian schools in 525 and his persecution of Hellenes, may account for a great drop in the publishing trade and a corresponding failure in the supply of material. The cessation of pagan philosophy and the termination of the non-Christian world threw the business of literature and education entirely on the monasteries. It is natural that material should have been economised, and, with this object a small uniform hand adopted. Even strictly theological demands were very large in this period of acute controversy, and with literature also depending on the same class it is conceivable that a change in the form, make-up, and hand of books took place.

But a more important factor in the change was a political circumstance, the Arab conquest of Egypt and Syria. This is the most important single event of the age. More than the acceptance of Christianity, more than Justinian's closing of the schools, it marked the end of the ancient world. The most celebrated schools of Egypt and Syria—Syria which had produced nearly the whole of the literature, both profane and Christian, for many centuries—were overwhelmed with instantaneous rapidity. Alexandria, Jerusalem, Tripolis, Antioch, became Arab. The Arabs brought paper with them and used it alongside of papyrus in their Egyptian administration. The Sinaitic Greeks, as we have seen, seem to have experimented with paper for books. Walid at Damascus *ἐκώλυσε γράφεσθαι Ἑλλησιν τοῖς δημοσίοις τῶν λογοθεσίων καὶ βιβλίας, ἀλλ' Ἀραβίοις αὐτὰ παρασημαίνεσθαι, χωρὶς τῶν ψήφων, ἐπειδὴ ἀδύνατον τῇ ἐκείνῃ γλώσσῃ μυριάδα ἢ δυάδα ἢ τριάδα ἢ ἄνω ἤμινι ἢ τρία γράφεσθαι* (Theophanes, 575, 13), and the same statement with its curious reason is repeated of the year 751 (*ib.* 604, 9). Up to this date papyrus had been the principal writing-material in Greece, and the source of papyrus was Egypt. This

now presumably ceased,¹¹ and as paper is not found in Eastern Europe for several centuries to come, the Byzantines seem to have been reduced to their *διφθέρας*.

The book-form, writing on recto and verso, and the adoption of a small, comparatively quick, and uniform hand all result from this circumstance. Uncial remained, but to a diminishing extent. The new *συρμαινογραφία*, which was to expel it and which is traceable as far back as 750, must have taken its rise at this period, namely, about one hundred years before Plato's birth. It must be presumed to be an adaptation of the cursive in use at the moment at Constantinople. Who, in face of the failure of the supply of papyrus, the costliness of vellum, the size and expensiveness of uncial, initiated a small rapid book-hand based on cursive, we do not know. Within a hundred years it was being produced at the Stadion, and by 835 it was a fully developed hand, long past the experimental stage, and which set the fashion for the following centuries.

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¹¹ That about A.D. 900 papyrus books still came from Egypt to Greece seems to follow from the expression *καλαμαὶ βιβλικοὶ* in one of Arethas' letters (Kugens *Antbar*, p. 117). In

later centuries the chroniclers occasionally refer to trade with Egypt, e.g. Pachymeres ii: 595, Nicephorus Gregoras i: 101.

GREEK MUSIC AND ITS RELATION TO MODERN TIMES.

(Being the Cromer Greek Prize Essay for 1919.)

I.

IN Greece the art of music was honoured as scarcely inferior to poetry itself, and in lyric and tragic compositions at least the two arts were almost inseparably allied. The religious and athletic assemblies, the Panathenaia, the Olympia, the Pythia, the Karneia, etc., were not complete without a goodly number of musical celebrations, and from quite early times an important musical contest had been held at Delphi in which the greatest singers and instrumentalists took part. At Athens the free-born youth was trained in the essentials of the art, and music was considered so much a part of the national life that innovators were not infrequently charged with aiming at the subversion of the state itself. Greek literature is so full of allusions to, and metaphors drawn from music, that a question of real interest and importance often presents itself to us: how far are we in Europe, who have inherited so much in literature and the plastic arts from the Greeks, also indebted to them for our modern music? Is there, in short, any recognisable chain of descent from Terpander and Timotheos to Beethoven and Wagner?

Strong negatives and affirmatives have been given to this question because of the doubt which exists about the real nature of Greek music itself. Some enquirers believe that ancient Greek music contained the germs of that ecclesiastical system from which modern music has been evolved; others arriving at different conclusions, deny that the music of the golden age of Greece bears any real relation to that of modern times. This one point at least is certain: unless we can show that mediæval music is only a later stage of Greek music, any search for a connexion with modern music is doomed to failure. The object, then, of this paper is to discuss the nature of Greek music itself, and to trace its history as far as mediæval times.

It is common knowledge that the basis of the ecclesiastical music of the middle ages was a number of scales, known technically as 'modes,' which differed from each other in three ways:—

(1) Though they each consisted of five whole tones (T) and two semitones (S), the arrangement of these tones and semitones differed in the various scales.

(2) The chief note, or melodic centre, known as the Dominant, occupied different relative positions in different modes.

(3) The note on which a melody written in one of these modes generally ended was known as the Final, and did not necessarily have the same relative position in all the modes.

For example, in the two following scales:—

D E F G A B C D (the first Gregorian Mode),
B C D E F G A B (the fourth " " ")

there are the following differences:—

(1) The scheme of tones and semitones in the first is: T S T T T S T; in the second it is: S T T S T T T.

(2) The Dominant of the first is A, the fifth note of the scale. The Dominant of the second is also A, but it is the *seventh* note.

(3) The Final (*i.e.* the *melodic* ending note) of the first is D, the first note of the scale. The Final of the second is E, the fourth note of the scale.

Now if the rudiments of a modality something like this cannot be satisfactorily traced in ancient Greek music, we must admit that the chief factor in the evolution of the mediaeval modes was not Greek. If on the other hand, some such modality (even though of a very elementary nature) can be traced in Greek music, we shall be justified in searching for the connexion between this modality and the mediaeval music. Thus the first thing we have to settle is the question whether Greek music was essentially modal or not. But before examining any evidence ourselves a short summary of the more important opinions expressed on the subject may be useful.

(1) There is a strong feeling among musicians that it would be entirely anomalous if the art as practised by the Greeks had had no influence and left no traces on the art of the present day. The *Oxford History of Music*, while not committing itself on the subject of early Greek music, admirably expresses the point of view (Preface to Vol. I p. 6): 'Music, among all the arts, has exhibited the most continuous evolution. Over six centuries of work went to provide Purcell with his medium. Even those changes which appear most violent in character may all be rightly regarded as parts of one comprehensive scheme; sometimes adjusting a balance that had fallen askew, sometimes recalling a form of expression that had been temporarily forgotten or neglected, never wholly breaking the design or striving at the impossible task of pure innovation.' Such a view if unsupported would be mere prejudice; but for centuries it had been noticed that the ecclesiastical modes bore the names of Greek races just as did the Greek scales which Plato and Aristotle call *harmoniai*. This coincidence of nomenclature scarcely seemed attributable to mere chance. Furthermore, there was a persistent tradition that St. Ambrose of Milan took four scales from the Greeks to be the basis of liturgical music, to which St. Gregory added four more. These two things seemed to indicate so intimate a connexion between Greek and mediaeval music that scholars approached the

study, consciously or unconsciously, with that presupposition. Beech, Bellermann, Marquard, Westphal, Fétis, and Gevaert, all believed that evidence from Greek sources gave sure ground for assuming as proved the connexion between the old Greek scales (*harmoniai*) and mediæval music.

(2) In 1894 D. B. Monro published his book *The Modes of Ancient Greek Music*. There he examined the evidence afresh and concluded that the *harmoniai* differed chiefly in *pitch*: that is to say, the Dorian scale differed from the Phrygian not as C major differs from C minor, but as C major differs from E♭ major, for example. 'If difference of mode or species cannot be entirely denied of the classical period of Greek music, it occupied a subordinate and almost unrecognised place' (p. 108). According to Monro the liturgical scales came not from Greece proper, but arose in Alexandrian times and are first found in the work of Claudius Ptolemaeus, a savant of the second century A.D. Such a theory was fatal to all ideas of relation between music in the days of Pericles and our own. Monro's book was adversely reviewed by H. S. Jones and Van Jan, but the reputation of the author and his skill in arranging his evidence and making inferences persuaded many of the soundness of his views. The new edition of Grove's *Dictionary of Music* is inclined to accept the theory, and the *Encyclopædia Britannica* says boldly: 'All the evidence irresistibly tends to the conclusion that the Greek "modes" were a series of scales identical in arrangement of intervals and differing only in pitch.'

(3) The late Professor Macran in his edition of Aristoxenos (1900) brought forward another theory. In dealing with the *harmoniai* he believed there were only *three* kinds, a Dorian, an Ionian, and an Aeolian which survived the others (p. 18), but the most important and ingenious part of his work concerns an incipient modality which he finds in the seven 'species of octave,' εἰς τὸ ὅλόν τεσσάρων. In the scale:—

A B C D E F G A B C D E F G A

the seven successive octaves, B-B, C-C, D-D, etc., have different successions of tones and semitones; they are different 'species' or 'kinds' or 'schemes' of octave. Prof. Macran asserted that there were in use seven such octave scales, all of the same pitch as a whole, all commencing on the same note; but that the chief note in each, i.e. the note most frequently used in melody, was in a different relative position. In one scale it would be near the top, in another at the bottom. He thus combined the pure modal view with the pure pitch view; for undoubtedly the sequence of intervals differs, yet at the same time a scale whose chief note is high up will give higher-pitched melodies than one whose predominant note is lower down.

(4) The late Professor Cook Wilson in a paper read before the Oxford Philological Society in 1904 proposed a theory which reasserts the pure modal view of the *harmoniai*, but differs considerably in details from the Westphal-Gevaert one.¹

¹ A full account of this theory is given in Recent Theories of the Greek Modes, *Classical* Mr. Donisthorpe's valuable article: *Some Quarterly*, April, 1912.

(5) Mr. Cecil Torr's *Interpretation of Greek Music* (1910) indirectly attacks the idea of a connexion between Greek and modern music from a standpoint entirely opposite to that of Monro. His thesis is that the Greek scales known as *trávoi* (which are quite distinct from the 'octave-species' and are generally believed to have differed solely in pitch) actually made use of intervals differing minutely but quite perceptibly from one another. The tones and semitones of the *trávoi* followed one another in the same order in all the *trávoi* but one tone differed from another in size, one being normal, another being a shade small. This would mean that the Greeks used intervals unknown in practice to Western civilization. Mr. Torr himself says, 'The charm of the ancient melodies was the subtle variation of the intervals through which they rose and fell; and all their charm is sacrificed when they are forced into a modern scale.' 'Greek music with the tempered scale would be as bad as Greek architecture with straight lines substituted for its subtle curves.' If that is so, it would be difficult to trace any connexion between these delicate semi-oriental scales and the modern one.

In view of this variety of opinions it is not surprising that neither Greek scholars nor musicians know where to put their trust. At the same time such differences of opinion are quite natural; for the difficulties which beset an enquirer are many and one false step has dangerously large results. The chief points we have to bear in mind are:—

(1) All notions derived from modern or even mediæval music must be resolutely set aside. Neglect of this led Westphal and Gevaert into exaggerating the similarities they could trace between Greek and modern music.

(2) Little help can be derived from the extant fragments of Greek music. They are all very mutilated or the products of the first two centuries of our era. They may be useful in checking our conclusions but by themselves they do not tell us much.

(3) Though, commencing with Aristoxenos (320 B.C.), there are works on Greek music right down to the time of Bryennios (1350 A.D.), we have no technical writers of the period which is most important for our enquiry. For pre-Aristotelian times we have to rely mainly on musical references found in poets and philosophers who assume in their readers just that knowledge which we desire.

(4) The quality of the later writings varies greatly. Some like Aristoxenos are fragmentary; others are really elementary handbooks, like Bakcheios and Kleonides. Some again, such as Plutarch and the passages of Athenaios are antiquarian and none too critical. Worst of all are the mathematical and speculative writers who fall under the spell of the Pythagorean theory of numbers (Gaudentios and Nikomachos).

With these preliminaries we may turn to the question: Was the ancient Greek music modal or not?

II.

There are two non-modal theories of the *ápporía*, Macran's and Menro's, both of which are open to serious objections. Let us deal with Macran's first.

After describing the elementary tetrachords whose bounding notes were a perfect fourth apart, Macran proceeds: 'When this meagre group of four notes was felt to be inadequate to the expression of human emotion, a ready method for the production of a more ample scale was sought in the addition to the original tetrachord of a second, exactly similar to it. But immediately the question arose, how was the position of the second tetrachord to be determined in relation to the first? Or, to put it more generally, supposing a scale of indefinite length to be constituted of a series of similar tetrachords, how was the position of these tetrachords to be relatively defined? To this question it seems there were three possible answers to the theorist, each of which no doubt found support in the art-product of some tribe or other of the Hellenic world. The method of determination proposed in each answer constituted a distinct *ápporía* or Harmony, which term I believe to have meant primarily an 'adjustment' not of notes (for these are not the units of music) but of tetrachords.'

The first method was one of conjunction i.e. the highest note of one tetrachord is coincident with the lowest note of the tetrachord immediately above it. This Macran calls the *Ionic Harmony* and gives it as:—

B C D E F G A B₂ C D E₂ F G

The second method is one of disjunction where there is an interval of one whole tone between the highest note of one tetrachord and the lowest note of the tetrachord immediately above it. This is designated as *Doric*, and written as:—

A B₂ C D E F G A B C D E F₂ G A B

The third method of adjustment employing conjunction and disjunction alternately, interposed a tone between every second pair of tetrachords, while every other pair were conjunct. This Harmony I shall assume to have been called *Aeolian*; it resulted in the following scale:

B C D E F G A B C D E F G A

Several considerations make this theory untenable:—

(1) Plato and Aristotle, to mention only two of the authors who refer to the *ápporía*, give us the names of at least six *ápporía*.

(2) The Aristotelian problems repeatedly state that the old *ápporía* had only seven notes or strings (xix. 25, 32, 44). But the *Aeolian Harmony* of Macran cannot be clearly defined in an interval less than an octave and a fourth to show the alternate conjunction and disjunction.

(3) The assumption of a scale of indefinite length cannot be admitted. The early Greeks, using as Professor Macran believed a mere tetrachord, would scarcely make a purely imaginary and theoretical scale of indefinite length the stepping stone for progress in the musical art.

(4) The passage of Herakleides Pontikos on which the theory ultimately rests, really proves nothing. It runs as follows:—

Ἡρακλείδης δ' ὁ Ποντικός ἐν τρίτῳ περὶ Μουσικῆς οὕδ' ἁρμονίαν φησὶ εἶναι καλεῖσθαι τὴν Φρύγιον, καθάπερ οὐδὲ τὴν Λύδιον, ἁρμονίας γὰρ εἶναι τρεῖς: τριὰ γὰρ καὶ γένεσθαι Ἑλλήνων γένεθ, Δωριεῖς, Αἰολεῖς, Ἴωνες, οὐ μικρὰς οὖν οὐσῆς διαφορὰς ἐν τοῖς ταύτων ἡθεσιν. . . . τὴν οὖν ἀγωγὴν τῆς μελωδίας ἦν οἱ Δωριεῖς ἐποιοῦντο Δωρίαν λεγόντων ἁρμονίαν. λεγόντων δὲ καὶ Αἰολίδα ἁρμονίαν ἦν Αἰολεῖς ἦδον. Ἰαστί δὲ τὴν τρίτην ἐφασκον ἦν ἦκουσαν ἡδόντων τῶν Ἴωνων (Athenaios, 624 c).

The three *ἁρμονίαι* mentioned by Herakleides, the Dorian, the Aeolian and the Ionian, we know to have been the earliest, whereas the Lydian and Phrygian which Herakleides excludes were said to have been brought from Asia Minor to Greece by the followers of Pelops;¹ and surely Herakleides is here giving us not a piece of real evidence but an expression of a prejudiced and conservative patriotism. We must give no more weight to these remarks of Herakleides than we do to the passing claim of Plato (*Laches* 188 D) that the Dorian is the only true Greek *ἁρμονία*.

III.

It is not an entirely easy matter to dispose of Monro's theory which makes the effect (*ἦθος*) of the *ἁρμονίαι* depend primarily on pitch and while not denying the existence of a shadowy modality, relegates it to an insignificant place in the aesthetic perceptions of the Greeks. But the following considerations weigh heavily against it.

(1) Monro's theory has as a corollary the supposition that the pitch of any given *ἁρμονία* was always the same; for otherwise the *ethos* would be changed and the scale lose its identity. For example, on this theory the Dorian *ἁρμονία* which was solemn and stately and the Phrygian which according to Aristotle was exciting (*ἐνθουσιαστικός*), would both be of medium pitch and the least accident of intonation would transform a solemn song into an exciting one. Did the Greeks have or could they have had, a fixed standard of pitch? They certainly did not possess in early times any instrument to form an unalterable standard of pitch; and the only other alternative, the possession of a sense of absolute pitch, is an assumption we must not make without very strong evidence to support us. If we are guided by the analogy of Welsh, Hindu or Celtic singers we must imagine the Greek kitharode tuning his lyre just to suit the range of his own voice. This hidden corollary then is a serious obstacle to the acceptance of Monro's theory.

¹ Pollux, *Onom.* iv. 65; and Athen. 623 c.

(2) The names of the *ᾠραι* mentioned by Plato and Aristotle are so striking that some weighty reason must be at the bottom of the matter. The application of tribal names to musical scales at once suggests that the *ᾠραι* were named after the people who first used them; and our evidence goes to prove that this was the case.³ Now when a Dorian first heard a Phrygian song, the effect must have been extremely novel for him to call it distinctively Phrygian. His own *ᾠρα* was stately and disposed a man to courage; the Phrygian he found exciting. On Monro's theory these two *ᾠραι* are both of medium pitch. Can we imagine the Greeks being so sensitive to the difference of a single tone? Their musical perceptions may have differed from ours, but we must be chary of believing them to have differed so vastly. Musicians can and do realise how emotional effect arises from mere pitch but they cannot conceive how one single tone could work so great a transformation of ethos. Yet this difficulty is immediately removed by the modal theory; anyone who has heard modal melodies in a Roman Catholic church will at once realise how easily the names of the Greek *ᾠραι* are explained by the assumption of a modal differentiation.

(3) We have preserved for us in several places the names of 'inventors' of new *ᾠραι*. Terpander invented a Boeotian, Sappho the Mixolydian and a certain Xenokritos a Locrian.⁴ If pitch was the criterion of ethos, the invention of a new *ᾠρα* means simply stretching or slackening the strings a little more than usual, a thing which must have happened thousands of times in the ordinary process of tuning before Terpander or Xenokritos. There is no reason on Monro's theory why the names of great poets like Sappho should be so carefully preserved for so small a matter. If however we can accept the modal view, an easy explanation offers itself. The first great poet to make an extensive use of a tribal mode and secure its use in other parts of Greece was honoured by the title of 'inventor' (*εὐρετής*). It requires great art and skill to introduce agreeable melodies to which the ear has not been accustomed; but the taking of the same melody at a different pitch is a variety for which the inventor would hardly have had his name so carefully delivered to posterity.⁵

(4) No reviewer or critic of Monro has pointed out the fatal weakness which is revealed by an examination of his authorities. It is nothing less than an inconsistency as to the pitch of the *ᾠραι*. After quoting Pratinas p. 5 (Athen. 624r):—

μήτε σφύρονον δίωκε μήτε τὰν ἀνείμενον
 Ἰαστὶ καθῶν, ἀλλὰ τὰν μέσων ἰσθῶν
 ἀρουρᾶν αἰόλιζε τῷ μέλει.

Monro concludes that the Aeolian was a scale of medium pitch lying between the Ionian and some other *ᾠρα*. Yet immediately Laus of

³ Athen. 624r (quoted above); Pollux *Onom.* iv, 65; Holzerman, *Athen.* 28.

⁴ Schol. on Aristoph. *Acharn.* 14; Plutarch, *De Musica*, c. 16; Callim. in Schol. on

Pindar, *Ol.* vi, 117.

⁵ 85r. Francis Kyle Seyles, *Philosoph.* Trans. 1769, vol. II, p. 735.

Hermione is quoted as saying that the Aeolian *ἁρμονία* is deep-sounding (*βαρύβρομος*).

Again in reference to a passage of Telestes (Athen. 625 F):—

τοὶ δ' ὀξύφωνοις πεπεσμένοι ψαλμοὶ κρείσσον
Λύδιον ὕμνον.

Monro writes, 'the epithet *ὀξύφωνοις* is worth notice in connexion with other evidence of the high pitch of music known as Lydian.' But in spite of this in quoting Plato (who labels the Ionian and Lydian *ἁρμονίαι* as effeminate and convivial) he translates the epithet *χαλαραί* as low pitched. These two discrepancies are decisive; for if pitch is the only valid criterion of ethos, we should expect the Greeks to be very certain of the pitch of any particular *ἁρμονία*. That they were not is a clear proof that pitch was not the essential element in the ethical effect of music.⁴

IV.

It is difficult to imagine what other theories of the *ἁρμονίαι* there could be except Macran's and Monro's and the older modal one. We have already shown that both Macran's and Monro's are open to serious if not to insuperable objections; but such a demonstration is not sufficient by itself to prove the modal theory; it only leads us to a more careful search for direct evidence. The following are the more important passages and considerations which lead to the modal view.

(1) Plato, *Philebos*, 17: 'Ἄλλ', ὦ φίλε, ἐπειδὴν λάβῃς τὰ διαστήματα ὅποσα ἐστὶ τῶν ἀριθμῶν τῆς φωνῆς ὀξύτητος τε πέρι καὶ βαρύτητος, καὶ ὅποια, καὶ τοὺς ὅρους τῶν διαστημάτων, καὶ τὰ ἐκ τούτων ὅσα συστήματα γέγονεν, ἂ κατιόντες οἱ πρόσθεν παρίδουσιν ἡμῖν τοῖς ἐπαμένοις ἐκείνοις εὐλαίᾳ αὐτὰ ἁρμονίας. . . . The only meaning this passage can have is that the *ἁρμονίαι* were systems or scales (for *σύστημα* is the common word for a musical scale) which were distinguished from each other by the varied allocation of their intervals.

(2) Plato, *Nomoi*, 605 D: τῇ δὲ τῆς κινήσεως τάξει μῦθος ὁμοῖα εἶη, τῇ δὲ αὖ τῆς φωνῆς, τοῦ τε ὀξέος ἅμα καὶ βαρείου ζυγικρανυμέναν, ἁρμονία ὁμοῖα προσαγορεύεσθαι. This is a rather vague statement but clearly does not refer a *ἁρμονία* to pitch but to the mingling of high and low notes. Bearing in mind the reference to highness and lowness in the preceding *Philebos* passage we may assume Plato had the same kind of idea running through his mind here.⁵

⁴ There is no need of real reason to refer the words *εὐλαίᾳ*, *ἁρμονίας* and *χαλαραί* to pitch at all (cf. H. S. Jones, *C.R.*, 1894). If we agree with Monro that they do refer to pitch we are faced with the above impasse. If on the other hand we give them an ethical

meaning, most of Monro's evidence for his theory disappears.

⁵ Cf. *Symposium* (esp. Vincent, *Notices*, p. 28): ὁμοῖα δ' ἄλλα σύστημα φέγγει ὅταν ἀκραιώται τε καὶ σμικρύνεται τὸ δὲ εἰς ἁρμονίαν εἶναι τοῦ αἰσίου, καὶ ἀσίου καὶ μέσιου.

(3) The Pythagorean theory of the soul as a *ἁρμονία* (cf. Plato, *Phaedo* 86a7-c5), so far as it is related to music points distinctly to the modal theory. The soul of a good man was not more highly strung than the soul of a bad man; its constituents were merely better attuned and in proportion. As the Dorian scale resulted from the best tuning or 'fitting' of the lyre-strings (*ἁρμονία*), so the best man was the result of the best fitting of the constituents of his soul. A man might be amatory, warlike or effeminate, but it was not his soul as a whole which was more or less highly strung; the difference lay in the altered relations of the parts of the soul to one another. In the same way one scale might dispose a man to courage, like the Dorian, or have a relaxing effect like the Lydian or Ionian. The intervals were the same in each case but the alteration in their collocation gave rise to the different effects.

(4) Aristophanes, *Knights* 985:

Ἄλλὰ καὶ τὸδ' ἔργον θαν- μάζω τῆς ὑμνουσίας.	ἄλλην δ' οὐκ εἶδεναι μαθεῖν·
αὐτοῦ φασὶ γὰρ αὐτὸς οἱ	κᾶτα τὸν κιθαριστὴν
παῖδες ὡς ξυνεφοίτων,	ἔργισθ' ἀπαγεῖν καλεῖ- ται, ὡς ἁρμονίαν ὁ παῖς
τὴν Δωριστὶ μὲν ἂν ἁρ- μόττισθαι θαρὰ τὴν λύραν.	αὐτὸς οὐ δύναται μαθεῖν ἢν μὴ Δωροδοκιστί.

One has to be careful in extracting precise information from the quips and jokes of a comic poet, but surely beneath this jibe of Aristophanes it is not fanciful to see the fact that the learning of a new *ἁρμονία* required some effort on the part of a student. Why? Clearly not because of a mere difference of pitch. No Athenian boy would be so incompetent as not to be able to tighten up the strings of his lyre or kithara as a whole: the turning of the crossbar would effect that. But to tune the lyre to a new modal scale, where individual strings had to be altered, might conceivably have caused difficulty to a boy of abnormal musical taste and perceptions.

(5) Aristotle, *Politics*, III. 3, 1270b: Εἴτερον γὰρ ἐστὶ κοινωνία τις ἢ πόλις, ἐστὶ δὲ κοινωνία πολιτῶν πολιτεία, γενομένης ἑτέρας τῶν εἶδων καὶ διαφερούσης τῆς πολιτείας ἀναγκαῖον εἶναι δόξαιεν ἂν καὶ τὴν πόλιν μὴ εἶναι τὴν αὐτήν, ὥσπερ γὰρ καὶ χορὰν ὅτι μὲν κωμικὴν ὅτι δὲ τραγικὴν ἑτέραν εἶναι φανερὸν τῶν αὐτῶν πολλάκις ἄνθρωπων ὄντων, ὁμοίως δὲ καὶ πάσαν ἑλληνικὴν κοινωνίαν καὶ αἰνέσειν ἑτέρας, ἢν εἶδος ἑτέρας ἢ τῆς συνθέσεως, οἷον ἁρμονίαν τῶν αὐτῶν φθόγγων ἑτέρας λέγομεν ὅτι μὲν ἢ Δωριος ὅτι δὲ Φρύγιος.

This passage (first quoted by Professor Cook Wilson) is far from definite but can only be explained on the modal theory. Literally τῶν αὐτῶν φθόγγων is meaningless. If however φθόγγος means 'a note' of a certain name such as Mese or Paramese, without defining any functional value but merely the position of the corresponding string on the lyre, the passage becomes highly conclusive.

(6) Aristotle, *Politics*, VIII. 7, 1342b: Φιλόξενοι ἐγκειρήσας ἐν τῇ Δωριστὶ ποιῆσαι διθύραμβον ΤΟΤΕ ΜΥΣΟΥΣ ΟὐΧ ΟἶΟΣ ἔ' ἦν ἄλλ' ὑπο

τῆς φύσεως αὐτῆς ἐξέπεσεν ἐς τὴν Φρυγίᾳ τὴν προσήκουσαν ἁρμονίαν πάλιν. This very important passage points unmistakably to modality and not to pitch as the criterion of *ethos*. It is not a matter here of extempore playing on the part of Philoxenos, but of deliberate composition. If pitch had been the only difficulty, transposition would have removed the trouble; in which case Aristotle would not waste his time relating the incident. As a modern analogy, we may remark that funeral marches are generally in the minor mode, but Handel's march in 'Saul' is in the major. Philoxenos tried some such *tour de force*, but failed.

(7) Valuable inferences may be drawn from a consideration of the topics dealt with in the fragments of the *Harmonics* of Aristoxenos. He divides the science of Harmonic (Chap. 35-38) into seven parts: genera, intervals, notes, scales, keys, modulation and the construction of melody. 'The *fourth* part' he says² 'will consider scales firstly as to their number and nature, secondly as to the manner of their construction from the intervals and notes. . . . Our predecessors either made no attempt at all at enumeration of scale distinctions confining themselves to the seven octave scales which they called Harmonies (*ἁρμονίαι*); or if they made the attempt they fell short of completeness, like the school of Pythagoras of Zacynthus and Agenor of Mitylene . . . The *fifth* part of our science deals with the keys in which the scales are placed for the purposes of melody.' Thus Aristoxenos clearly considered the *ἁρμονίαι* as 'systems' and quite distinct from the *τόνοι* or keys, which differed solely in pitch. That the systems were defined by the succession of intervals is implied earlier in the work (chap. 6). 'As we then observed all the scales with the exception of one have been completely passed over; and of that one system Eratokles merely endeavoured to enumerate the figures of one magnitude, namely the octave, empirically determining their number, without any attempt at demonstration by the recurrence of intervals.' These passages of the chief musical theorist of antiquity leave no doubt that the *ἁρμονίαι* were scales differing in the succession of the intervals composing them.

(8) Cicero, *Tusculan Disputations*, i. 18: Harmoniam autem ex intervallis sonorum nosse possumus, quorum varia compositio etiam harmonias efficit plures.

This is a lucid confirmation of the Greek passages given above. It may be said that Cicero is rather a late author to quote as an authority on so important a matter; but his old tutor Posidonios was no mean musician (Athen. 635a) and from him Cicero no doubt obtained much of that musical knowledge which is found somewhat frequently in the *Tusculans*.

(9) To clinch the argument, a passage from Plutarch's *De Musica* (chap. 16, 1136b) is perhaps of more importance than any other quotation of an ancient author. Ἀριστοξένος δὲ φησι Σαπφῶ πρώτην εὑρᾶσθαι τὴν Μιξολυδίστι, παρ' ἧς τοὺς τραγῳδοποιοὺς μαθεῖν λαβόντας γοῶν αὐτοὺς συζῶσαι τῇ Δωριεῖ, ἐπεὶ ἡ μὲν τὸ μεγαλοπρεπές καὶ ἀξιοματικὸν ἀποδί-

² Mazon's translation.

δοῖσιν, ἣ δὲ τὸ παθητικόν, μέμεται δὲ διὰ ταύτων τραγῳδία· κῆθι δὲ Λαυπροαλία τὸν Ἀθηναίων συνιδόντα, ὅτι οὐκ ἐνταῦθα ἔχει τὴν διὰξενον, ὅπου σχεδὸν ἅπαντες ᾄδοντο, ἀλλ' ἐπὶ τὸ ὄξύ, τοιοῦτον αὐτῇ ἀπεργάσασθαι τὸ σχῆμα οἷον τὸ ἀπὸ παραμίστης ἐπὶ ἐπάτης ἐπαυῶν. Ἀλλὰ μὴν καὶ τὴν Ἐπανεμμένην Αὐδιστί, ἥπερ ἐναντία τῇ Μιξολυδιστί, παραπλησίαν οὔσαν τῇ Ἰάδῃ ὑπὸ Δάμωνα εὐρησθαι φησι τοῦ Ἀθηναίου. Here we find the Mixolydian *ἁρμονία* determined not by its pitch but by the relative position in it of a certain distinctive tone-interval; and furthermore a Lydian scale is recognised as having its succession of intervals just in the reverse order of those of the Mixolydian. The schemes of the two scales, in the diatonic 'genus' must have been:—

Mixolydian S T T S T T T
 Epaneumene Lydian ... T T T S T T S

We shall find later that these 'schemes' are confirmed from other sources, but for the present it is sufficient to point out how remarkable is the support which this passage gives to the modal theory. When we remember that it comes actually from the pen of Aristoxenus himself, can any doubt remain about the validity and truth of the modal theory of the *ἁρμονίαι*?*

V.

After the preceding survey of the evidence relating to the *ἁρμονίαι*, we can come to some conclusion. Macran's theory of three *ἁρμονίαι* is built up on a very meagre portion of the available evidence, and is entirely refuted by the remainder. Monro's theory is more formidable, and at first sight all the evidence seems to go in its favour. The words *σύντονος* and *ἀνεμῆνος* so often repeated in the earlier authorities seem to point distinctly to pitch as the distinguishing feature of the various scales. Yet a closer examination of the theory reveals inherent improbabilities, and a consideration of the evidence for it shows fatal discrepancies. On the other hand, the modal view is supported more or less strongly by half a score of quotations, and the passages which seem to contradict it can be solved without any violent manipulation. Accordingly, we must admit that the Greek *ἁρμονίαι* mentioned by early writers derived their emotional and ethical effect on listeners fundamentally from the varying succession of the tones and semi-tones composing them. In other words, the *ἁρμονίαι* were actually modes. At the same time we must beware of attributing to them, as Westphal and Gevaert did, as elaborate a structure as we find in the mediæval modes. Our evidence is not sure enough for us to say whether or not they possessed

* Mr. Dennistoun (Cl. Quart. 1913) quotes three passages which seem to fix all scales to one scheme; but in every one of these cases it can be shown that Pythagorean influences have been at work and that only the Dorian *ἁρμονία* is in view. The evidence for the

modal theory is far too weighty to be upset by these passages for which no easy explanation presents itself (cf. Gevaert, *Les Problèmes Musicaux d'Aristote*, p. 167; and Weil and Reinach's *Platonique de la Musique*, p. 92, n. 2285).

a definite melodic Final or Dominant (or reciting note), such as the liturgical scales possess. Of this one point, however, we may be sure: as far as a varied succession of intervals is concerned they were essentially modes.

Yet such a conclusion does not tell us much about the *ἀρσενία* as they were in actual use. Two further questions of no small importance arise: even granting that pitch was not the basis of the *ἀρσενία*, may not the modes still have differed from one another in pitch? Secondly, what was the series of intervals which composed a given *ἀρσενία*?

The first question has never been properly discussed. Most writers assume quite arbitrarily that there was or was not a more or less important difference of pitch between the various *ἀρσενία*. There is only one passage of Aristotle which has anything definite to say on the matter, and it is sometimes adduced as proof that there was a difference of pitch. It runs as follows (*Politics*, viii. 7, 1342a 20): 'Thus for those whose powers have failed through years it is not easy to sing the *σύντονα* scales; their time of life naturally suggests the use of the *ἀναιρέαι*.' Monroe remarks: 'In this passage the meaning of the words *σύντονα* and *ἀναιρέαι* is especially clear. But this passage cannot possibly refer to pitch for the following reasons:—

(1) If pitch alone is the difficulty, there would be no need to teach boys these modes. Old age would be the only master necessary.

(2) Aristotle has been mentioning *ἦθος*, only two lines before. Ought we not to refer the words *σύντονα* and *ἀναιρέαι* to *ἦθος* also?

(3) As a matter of fact, old men cannot sing low-pitched songs better than high-pitched ones; they find difficulty in singing any except medium-pitched ones. A man who in the prime of life was a tenor does not become a bass singer when he grows old; he remains a tenor, but loses some of his range at both ends of his voice.

(4) The Greeks thought that old men sang and spoke in a shrill voice. Several of the Aristotelian Problems mention the fact (xi. 3, 34, 40, 62).

The truth of the matter seems to be that some intervals and successions of intervals are more difficult to sing than others, and impose a greater strain on the vocal organs. Doh to La is always hard to sing; Doh-Te-Doh is easy. The meaning of Aristotle is that the melodies drawn from the *ἀναιρέαι* modes contained successions of intervals which did not tax the voice severely and were therefore suitable for old men in spite of their ethical qualities.

Accordingly we must leave the question of the pitch of the various *ἀρσενία* with a 'non liquet.' Common-sense would seem to indicate however that each individual singer sang all the modes at about the same pitch and chose the pitch to suit the best compass of his own voice. Beyond that we cannot safely go.

VI.

By far the most important question relating to the *ἀρσενία*, once we have established that they were modes, is to define the successions of intervals which constitute a given *ἀρσενία*. In dealing with this part of the subject

we have to remember two very important facts. In the first place the *ἁρμονίαι* were quite old in the time of Plato and had existed for centuries without being defined by any rigid theory. They were in essence the tunings of the lyre necessary to play tribal melodies and not text-book scales. We must not expect to find them logically constructed and scientifically arranged. Secondly, the existence of the 'genera' has to be borne in mind continually. According to the theory of the 'genera' a perfect fourth was variously divided in six principal ways at least:—

Enharmonic...	...	$\frac{1}{2}$	$\frac{1}{4}$	2	[= a perfect fourth]		
μαλακός Chromatic	...	$\frac{1}{3}$	$\frac{1}{3}$	1 $\frac{1}{3}$	"	"	"
ἡμιολιος	"	$\frac{2}{3}$	$\frac{1}{3}$	1 $\frac{1}{2}$	"	"	"
τοναίος	"	$\frac{1}{4}$	$\frac{1}{4}$	1 $\frac{1}{2}$	"	"	"
μαλακός Diatonic	...	$\frac{1}{2}$	$\frac{1}{2}$	1 $\frac{1}{2}$	"	"	"
σύντονος	"	$\frac{1}{2}$	1	1	"	"	"

Some if not all of these 'genera' were actually used and though it makes for simplicity of exposition to ignore their existence, it does not give us anything like a true idea of the nature of early Greek music.

We have already seen how Aristoxenos spoke of the seven octave-systems which were called *ἁρμονίαι*. He himself in his revised theory preferred to call them more scientifically *εἰδη τοῦ διὰ πασῶν*; and the forms in which he gave them are preserved for us in the 'Eisagoge' of Kleonides, the chief Aristoxenian writer of later antiquity. The list is:—

		Diatonic								Enharmonic						
Mixolydian	...	S	T	T	S	T	T	T	or	1	1	2	1	1	2	1
Lydian	...	T	T	S	T	T	T	S	"	1	2	$\frac{1}{2}$	1	2	1	1
Phrygian	...	T	S	T	T	T	S	T	"	2	1	1	2	1	1	1
Dorian	...	S	T	T	T	S	T	T	"	1	1	2	1	1	1	2
Hypolydian	...	T	T	T	S	T	T	S	"	1	2	1	1	1	2	1
Hypophrygian	...	T	T	S	T	T	S	T	"	2	1	1	1	2	1	1
Hypodorian	...	T	S	T	T	S	T	T	"	1	1	1	2	1	1	2

But besides this list which is found in other writers as well as in Kleonides, there is a second preserved in a famous passage of a writer of the second century A.D. Aristides Quintilianus. In the course of a discussion of the division of the tetrachord into 'genera' he sets down a series of scales which he says the old Greeks of *πᾶν παλαιότατος* used as *ἁρμονίαι* and definitely asserts that of these Plato made mention in the *Republic*. They are as follows:—

Lydian	...	1	2	1	1	1	2	1
Dorian	...	1	1	1	2	1	1	2
Phrygian	...	1	1	1	2	1	1	1
Ionian	...	1	1	2	1 $\frac{1}{2}$	1		
Mixolydian	...	1	1	1	1	1	1	3
Synonelydian	...	1	1	2	1 $\frac{1}{2}$			

The definite claim Aristides makes for these scales and the remarkable difference between them and the normal list warn us to be sure of their authenticity before accepting them. Gevaert never thinks of doubting them; Laloy believes that Aristides had access to the lost pre-Aristoxonian theory books but Monro rejected the evidence of Aristides. For the following reasons it is impossible to do other than accept them:—

(1) Though the passage is a digression, it is not as Monro says a crude interpolation. The scales are distinctly given as curious examples of the use of the enharmonic quarter-tone in the old scales. Their insertion arises naturally from the context and at the end Aristides calls attention again to the small interval (p. 21: *διότι δὲ τὸν ἐπὶ πάντων ἀκουστόν τῶν ἑξαφώνων*).

(2) He is quite aware that these scales differ from the normal list which he himself had already given (p. 17). Some, he says, do not reach to a full octave and he promises to explain why later. The fact that the promise is not fulfilled is rather in favour of the genuineness of the passage than otherwise.

(3) We have seen that a certain Lamprokles of Athens became famous for demonstrating the real theoretical structure of the Mixolydian *ἀφούρια*. Now the most remarkable scale of Aristides is the Mixolydian with its undivided three-tone interval at the top which obscures the true position of the 'disjunctive tone.' It was Lamprokles we may believe who first ascertained the theoretical division of this large interval.

(4) The much mutilated fragment of the *Orestes* of Euripides affords strong support for these scales. It is one of the oldest pieces of Greek music which we possess, and the intervals it uses coincide absolutely with the six lower intervals of the Phrygian scale of Aristides.

(5) More striking still is the evidence found in Mr. Abdy Williams' paper on some musical instruments found at Pompeii (*Cl. Rev.* 1903, p. 408). One of the instruments, a kind of primitive organ (probably a *πτερον*) gives the sequence of intervals:—

$$\frac{1}{2} \quad \frac{1}{4} \quad 1 \quad \frac{1}{2} \quad 2 \quad (\frac{1}{4} \quad \frac{1}{4} \quad 2 \quad 1\frac{1}{2} \quad 1)$$

The sequence in brackets agrees entirely with the Ionian of Aristides and we are told by an ancient writer that one of the scales used on such an instrument (the *πτερον*) is actually the Ionian! It is impossible to reject the evidence of Aristides after such considerations as these.

We can now compare the scales of Aristides with the normal list and draw some interesting conclusions.

(1) The Mixolydian of Kleonides and that of Aristides tally thus:—

$$\begin{array}{rcccccccc} \text{Kleonides} & \dots & 1 & 2 & 1 & 1 & 2 & 1 \\ \text{Aristides} & \dots & 1 & 1 & 1 & 1 & 1 & 3 \end{array}$$

(2) The Dorian corresponds as:—

$$\begin{array}{rcccccccc} \text{Kleonides} & \dots & - & \frac{1}{2} & 1 & 2 & 1 & \frac{1}{4} & \frac{1}{4} & 2 \\ \text{Aristides} & \dots & 1 & \frac{1}{4} & \frac{1}{4} & 2 & 1 & \frac{1}{4} & \frac{1}{4} & 2 \end{array}$$

The additional tone at the bottom of the Dorian of Aristides is worth particular notice; its significance will be explained later.

(3) The Hypolydian *stêos* of Kleonides is the same scale as the Lydian of Aristides:—

Kleonides (Hypolydian)	...	1	2	1	1	1	2	1
Aristides (Lydian)	...	...	1	2	1	1	1	2

Apparently the Lydian of Plato, with the advance of theory and the introduction of the scientific arrangement into Hypo-modes, changed its name. We find Plutarch (c. 16) referring to it as the *Epaneimone Lydiati*.

(4) The two Phrygian scales do not correspond as they stand, but Monro has already pointed out that the scale of Aristides is really related to the diatonic form of Kleonides. Comparing we obtain:—

Kleonides (Diatonic)	...	1	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	$\frac{1}{2}$	1
Aristides (Enharmonic)	...	1	$\frac{1}{1}$	$\frac{1}{1}$	2	1	$\frac{1}{1}$	$\frac{1}{1}$	1

(5) The Syntonolydian of Aristides is a very imperfect scale but it corresponds in some measure with the Diatonic Lydian of Kleonides:—

Kleonides (Diatonic Lydian)	...	1	1	$\frac{1}{2}$	$\frac{1}{2}$	1	1	$\frac{1}{2}$	$\frac{1}{2}$
Aristides (Syntonolydian)	...	-	-	$\frac{1}{2}$	$\frac{1}{2}$	2	1	$\frac{1}{2}$	$\frac{1}{2}$

Thus it seems that the so-called Syntonolydian of Plato's *Republic* was known later as simply the Lydian.

(6) Though we know that the old Ionian *âpauria* was called the Hypophrygian in later times (cf. Boeckh, *De Metricis Pindari*, ii. 8) very little correspondence can be found between the two scales:—

Kleonides (Diatonic Hypophrygian)	...	1	1	$\frac{1}{2}$	$\frac{1}{2}$	1	1	$\frac{1}{2}$	$\frac{1}{2}$
Aristides (Ionian)	...	...	...	...	...	-	-	$\frac{1}{2}$	$\frac{1}{2}$

(7) Kleonides gives seven octave species but Aristides gives six *âpauriai* only. The remaining species is the Hypodorian. From Athenaios (124 e) we learn that this species was the same as an old Aeolian *âpauria* which Plato did not discuss and Aristides therefore does not mention.

These *âpauriai*, we must remember, were a spontaneous growth due to a people keenly intent on expressing its emotions in the natural medium of song. In reality they had no existence except as the sources from which melody was drawn; the tuning of the lyre for a Lydian song was known as the Lydian *âpauria* and the scale which resulted was called the Lydian *âpauria* also. But the fundamental structure of the Lydian *âpauria* was not realised nor the relation it bore theoretically to any other *âpauria*. It was only when the theorists commenced their work that these scales were written down as independent phenomena. Lasos of Hermione the first theorist lived about 500 B.C.; but of his work we know little. A quarter of a century later Lamprokles of Athens distinguished himself by deciding the real theoretical structure of the Mixolydian *âpauria*; and during the lifetime of Sokrates another Athenian, Damon, did the same for the Lydian scale of Plato. These and other theorists did not invent

the scales; they endeavoured to find some principle of structure in them and on that basis to complete those scales which were defective. The culmination of this classification of the *ápporiai* is found in the work of Aristoxenus (320 B.C.). Now the scales of Aristides are the *ápporiai* as they existed before the work of classification was complete, whereas the scales of Kleonides are the *ápporiai* seen in the light of Aristoxenian theory. The scales of Aristides are of the utmost importance for the study of Greek music and from them we can obtain a very fair idea of what Greek music was like in the days before Plato.

(1) We have to acknowledge, what the 'Orestes' fragment and the hymns found at Delphi lead us to suspect, that ancient Greek music would sound utterly barbaric to our modern ears. The quarter-tone interval which was used so frequently is unknown to us in Western Europe and its importance must not be under-estimated. The simplest melody which contained it would be unintelligible to us.

(2) A *ápporia* was not confined to one single 'genus' as we see from the Phrygian and Syntonolydian scales of Aristides. There the enharmonic diesis is used but the internal structure of the scale is decidedly diatonic. The later theorists would not lead us to suspect that such was the usual state of affairs but it seems that it was actually so.

(3) The old scales (and consequently the melodies written in them) did not always extend to a full octave nor were their intervals evenly distributed. Of these phenomena the Mixolydian and Syntonolydian are good examples.

Even though we should be unable to appreciate ancient Greek music we must not assume that it was an inferior or undeveloped form of art. It was vastly different from our own but it expressed for the Greeks quite as much as our modern music does. They found it capable of influencing character, and an art which can do that is not to be derided because we are unaccustomed to its peculiar idiom.

VII.

In order to trace the modal structure of Greek music still further we must digress a little into the history of Greek musical instruments, of which the lyre and kithara are for our present purpose the most important. From the strings of these instruments the notes of the scale originally took their names; the Hypatē, Mese and Nete being in reality the highest, middle and lowest strings on the lyre in point of position, and the Lichanes the string played by the first finger. The very old lyre had seven strings only, a number which was regarded as semi-sacred. The first break with the old order was made about 520 B.C. by Pythagoras (we are told) who added to the lyre an eighth string and thus obtained for his diatonic Dorian scale:—

E F G A B C D E

and within a hundred years of this date, string instruments had increased to at least eleven strings.¹⁰ The flute too, was improved during these years. Previously separate flutes had been used for the various scales, but a certain Pronomos of Thebes invented a flute to play the Dorian, Lydian and Phrygian.¹¹ Furthermore we have in this period the rise of theory on the part not only of the Pythagorean school but also of important musicians like Lamos or Hermionas and Lamprokles and Damon of Athens.

We must not imagine, however, that these innovations were any more favourably received than those of later progressive musicians like Wagner and Debussy.¹² Philoxenos, Timotheos and Pronomos were severely censured as offering an insult to the Muses and debasing the purity of art. Plato in particular objected to the new movements in music and definitely rejected for his ideal State those instruments which were adapted for playing all the modes (*Rep.* 399 c). And even by the time of Aristoxenos some of the conservative spirits had not become reconciled to the revolution which had taken place.

We shall understand these advances better if we keep in mind the list of modal scales as given by a later theorist like Kleonides (cf. *supra*). Let us imagine a musician with a seven-stringed lyre tuned to the diatonic Dorian *ἀπυρία* as:—

E F G A B C D (E).

If he desires to play a Phrygian melody he has to retune some of his strings to obtain a sequence: T S T T T S T; this he effects by raising the F and C each a semitone, assuming of course that the strict diatonic 'genus' is contemplated. The scale which Plato calls the Lydian (later Hypolydian) needs no less than five strings changed; and in the mixture of 'genera' which Aristides gives us in his list, the matter becomes even more complicated. This alteration and fitting of strings into a new scale was the origin of the term *ἀπυρία* as applied to music. The addition however of an eighth string to complete the octave and a ninth string placed a fifth below the Mese or middle string,¹³ opened up a new era, for the new instrument can now be tuned:—

D E F G A B C D E.

The octave E-E gives as before the diatonic Dorian *ἀπυρία*, but what of the octave D-D? Its scheme or species (*σχῆμα* or *εἶδος*) is:—

T S T T T S T

which corresponds with the scheme of the diatonic Phrygian *ἀπυρία*.¹⁴ It

¹⁰ Cf. Weil and Reisch's exhaustive notes: *Plutarchus, de is. Musico*, p. 119. On the whole of this section, cf. Curtis, *J.H.S.* cxviii.

¹¹ Athen. 631 e; and Paus. ix. 32, 5.

¹² Athen. 636 e; Paus. vi. 12, 10; Plutarch. *de Mus.* 1139 b, 1141 b.

¹³ For this ninth string, 'hyperhypate' or 'disphemias,' cf. Vincent, *Notices*, p. 234.

¹⁴ The Dorian octave E-E and the other

scales (in modern nomenclature are not regarded as an implication of the actual pitch of Greek scales, but are used partly in deference to a tradition which has grown up in the study of the subject, partly to avoid the excessive use of accidentals. On the subject of the exact pitch of Greek scales, cf. F. Giesl's brilliant article in the *Revue des Études Grecques*, 1909, p. 90 ff.

seems that the Greeks at first did not realise clearly that the Phrygian *ápporia* was here reproduced a tone lower as a whole, but considered the additional note as an extension of the Dorian *ápporia*. Consequently in the old scales which Aristides has preserved we find the lower D, making an interval of a tone with the real hypate of the Dorian, included in that *ápporia*. When however the Greeks did perceive what the added note really meant they were not slow to make use of the principle there found. Thus by the time of least of Aristoxenos they possessed a long two-octave scale which was known technically as the Greater Perfect System. It was—

A B C D E F G A' B' C' D' E' F' G' A''

It was seen that the octave B-B' gave a scale similar to the Mixolydian *ápporia*; C-C' a scale similar to the so-called Syntonolydian *ápporia* and D-D' one similar to the Phrygian. E-E' was actually the Dorian *ápporia*, the nucleus of the whole two octave scale. F-F' gave a scale approximating to the old Lydian; G-G' one like the Ionian and A'-A'' one like the Aeolian. Yet these scales could not be correctly called *ápporias*, since there was no returning necessary; and the word *ápporia* itself was unsatisfactory for other reasons. It was applied by the Pythagoreans exclusively to their perfect Dorian scale and at the same time was used to denote the enharmonic 'genus.' Accordingly, before the time of Aristoxenos the word dropped out of use in its distinctive sense of a modal scale in favour of the more scientific term 'octave-species' (*εἶδη τοῦ διὰ πασῶν*). At the same time the relation of the various octave-species to one another was better apprehended. Some were seen to be a perfect fourth above or a perfect fifth below others in the general scale. They accordingly fell into two groups thus:—

Syntonolydian ...	C-C	Lydian ...	F-F' (= Hypolydian)
Phrygian ...	D-D	Ionian ...	G-G' (= Hypophrygian)
Dorian ...	E-E	Aeolian ...	A-A' (= Hypodorian)

The Mixolydian was one apart by itself but the relation between the others was indicated by the use of the term 'Hypo.' The Aeolian became the Hypodorian, the Syntonolydian was known simply as the Lydian and the old Lydian of Plato as the Hypolydian. The Ionian became the Hypophrygian.¹⁰

Parallel to this development of the lyre and the evolution of the 'octave-species' there arose inevitably a series of scales known as *rávoi*. The advantage of a less frequent tuning derived from the use of the *εἶδη* was not an unmixed blessing. In the case of the Phrygian and the old Lydian no difficulty arose from the fact that the range of the voice in singing was extended; a few notes at the top or bottom of the voice did not make much difference. But when it came to the Mixolydian the voice had to descend to B; for the Aeolian it had to ascend to the top A''. D-D' or F-F' was fairly well within the normal part of the voice, which we have already assumed for the sake of example to have been E-E'; but B-B' was

¹⁰ For separate confirmation of these identifications, cf. Buschli, *Die Metrischen Pindarische*, ii. and Athen. 624 c.

going rather low while $G-G'$ was somewhat high. What was to be done? Changing strings for a new *ἀρραβία* was troublesome and the great advantage of the *αἶδη* had been the avoidance of that difficulty; yet the sacrifice of the best part of the voice was not to be thought of. The solution which the Greeks gave to the difficulty was a simple and effective compromise. If the section of the long scale which they desired to use for a modal melody were too low to sing comfortably they raised the pitch of the kithara as a whole in order to bring the required section into range. If the section containing the *αἶδος* were too high they lowered the pitch of the kithara as a whole. A turn of the cross-bar would suffice to effect this change and prove far less tedious than the retuning of several strings. In the scale:—

A B C D E F G A' B' C' D' E' F' G' A''

The Dorian octave E-E' was fairly well in the middle-range of the voice, let us say; but the old Syntonolydian from C-C' was somewhat low. By raising the whole scale two tones this Syntonolydian section was brought within the limits E-E', thus:—

C# D# E F# G# A B C# D# E' F# G# A' B' C#

Similarly the Hypophrygian was rather high as an octave-species and the kithara had to be lowered as a whole to bring the section into a suitable range, thus:—

F# G# A B C# D E F# G# A' B' C# D' E' F#

Such a raising or lowering of the kithara as a whole would be quite naturally called a *τόνος* or 'tightening up' and the alteration necessary to bring the Hypophrygian species into the normal range would be called the Hypophrygian *τόνος*. We should therefore expect to find that the higher a species is in the typical general scale, the lower-pitched relatively is the *τόνος* of the same name; and that the octave-species found between certain absolute limits in any *τόνος* would be the species bearing the same name as the *τόνος*. These expectations are amply satisfied by the actual facts. The two subjoined lists give the *αἶδη* written in the ascending order of pitch as they stand on the two-octave scale of the Perfect System and the *τόνοι* also in ascending order of pitch.

<i>αἶδη</i> or <i>αἶδη</i>		<i>τόνοι</i>	
Mixolydian	(B-B)	Hypodorian ...	(commencing on F)
Lydian... ..	(C-C)	Hypophrygian ...	(" " G)
Phrygian	(D-D)	Hypolydian ...	(" " A)
Dorian... ..	(E-E)	Dorian	(" " Bb)
Hypolydian... ..	(F-F)	Phrygian	(" " C)
Hypophrygian	(G-G)	Lydian	(" " D)
Hypodorian... ..	(A-A)	Mixolydian	(" " Eb)

Thus the order of the *tónoi* is just the reverse of that of the corresponding *εἶδη*, a perfectly natural consequence but a phenomenon which, as we shall see later, led to an inextricable confusion in mediaeval times.

Furthermore, if we take the seven *tónoi* named and in each *tónos* we select the octave F-F, we find that the species obtained is the species of the same name as the *tónos*.¹⁶

The most important point about these *tónoi*, however, is that they arose directly in connexion with the modal scales and their only *raison d'être* is to bring all the *εἶδη* within the best range of the voice. Aristoxenos himself clearly indicated this when he commenced the fifth part of his work with the words (p. 37): τὸ περὶ τοὺς τόνους ἐφ' ὧν τιθέμενα τὰ συστήματα μελωδεῖται and Claudius Ptolemaeus several times lays stress on the point.¹⁷

VIII

Did the *εἶδη* have any place in the practical art of music after the time of Aristoxenos; or did they only survive in theory books? The only argument ever brought forward against their use is that the 'species' of the fourth and fifth are also included in theory books and no one supposes that they were practical. The answer to the objection and the confirmation of the view that the *εἶδη* remained practical is to be found in the systematic work of Aristoxenos himself. He says (p. 8): 'Our presentation of the various methods in which simple intervals may be collocated will be followed by a discussion of the *resulting* scales (including the Perfect Scale) in which we will deduce the number and character of the scales from the intervals, and will exhibit the several magnitudes of scales as well as the different figures (*σχήματα*), collocations and positions possible in each magnitude; our aim being that no principle of *concrete* melody, whether magnitude or figure or collocation or position should lack demonstration. This part of our study has been left untouched by all our predecessors with the exception of Eratokles, who attempted a partial enumeration without demonstration. . . . He failed to observe that unless there be a previous demonstration of the figures (*σχήματα*) of the Fourth and Fifth, as well as the laws of their *melodious* collocation, such an empirical process (= as that of Eratokles)

¹⁶ Mr. Torr's theory of the *crisis* was mentioned in Section I. He supposes that Aristoxenos did not use a tempered scale and consequently that the size of the tones differed. Ptolemy (ii. 9) however assumes Aristoxenos' of sameness of the correct determination of intervals and Aristoxenos himself never worries about the distinction between a 'tuning' and an 'epitonic'. He calls both intervals a *semitone*. Consequently we must not assume with Mr. Torr that Aristoxenos was not using a scale which was

virtually tempered. Even if the scale were as Mr. Torr asserts, it would be the same for every *tónos*. It is hard to see how Mr. Torr's minute differences of interval had any basis in theory or in fact, as far as the ideas are concerned.

¹⁷ *Harmonika*, ii. 8: ὅ ἐν τοῖς αὐτοῖς ἀντόνοις ἀλλ' ὅς ἐστιν αὐτὸ μέγεθος. ii. 7: αὐτὸ γὰρ μέγεθος τὰς διαφορὰς ὅ ἐντέρας πάλιν εἴρηται. In the *συστήματα* τὰ κατὰ τὸν τόνον μεταβάλλει γινώσκοντες.

will give us not seven figures (of the octave) but many multiples of seven. Aristoxenus was the first scientific writer of Greek musical theory, and he set himself to find some principle whereby he might determine whether a given series of tones and semitones was practical or not. The five tones and two semitones forming an octave might be arranged in all kinds of ways, as:—

S S T T T T T; or T T T T S S T; or T S T T T T S.

none of which have a parallel in the actual scales in use. The method of Aristoxenus was to show first the species of the fourth (T T S; T S T) S T T) and fifth (T T T S; T T S T; T S T T; S T T T) and then to formulate the law of their melodious collocation which is (Arist. p. 65) that no scale should have in succession four intervals of a tone and the species of the two smaller consonances should be combined to avoid such a sequence. The later theorists give the species of the fourth and fifth but do not always point out that they are subsidiary and due to a desire to bring theory into a real close relationship with practice.

We cannot leave this part of our discussion without a short reference to Macran's ingenious theory of a movable Mese. Relying on one of the Aristotelian Problems (ix. 20) which states that the melody returns often to the Mese, he concluded that it was the Mese (or central note) of the Greater Perfect System which was meant. Thus in the typical scale:—

A B C D E F G A' B' C' D' E' F' G' A''

the middle A' is the Mese. In the Mixolydian section B-B' the Mese is near the top, in the Dorian section E-E' near the middle, and in the Hypophrygian G-G' near the bottom. Thus a melody in the Mixolydian keeps to the high notes of the scale rather than to the low, and in that sense it is a high-pitched scale. The Hypophrygian, on the contrary, uses its lower notes more frequently and so is a low-pitched scale. Mr. Denniston (*Cl. Quart.* 1913, p. 96) has already pointed out very serious objections to this theory and there is no need to repeat them here. We may, however, remark that it is by no means certain that by Mese the middle note of the Greater Perfect System was meant. It is very probable that only the Dorian scale is intended, and even if other scales are to be included the 'Mese' may be merely the fourth note ascending in any scale.¹⁸ Still, the rejection or acceptance of Macran's theory does not involve the acceptance or rejection of the modal view of Greek music; it deals only with one particular view of the kind of modality. The evidence is too slender and the objections too weighty to justify an implicit belief in this theory.

¹⁸ Such a view of course involves the use of what is known as the *tonosic scale plan*, or nomenclature by position and not by function. It does not occur definitely before Claudius Philolaus but Aristotle, *Politics*, III. 3.

1276 n, seems to imply it. It may even have been the origin of the two nomenclatures, cf. Weil and Reinach, *Platonique*, p. 44, n. 197.

IX.

We have now traced a modal structure in Greek music from the times before Plato down at least to a few centuries after the death of Aristoxenos. Up to this point our authorities have been Greek musicians themselves, such as Aristoxenos, or writers compiling from older Greek sources, as Aristides Quintilianus; but for the remainder of the history of modality we shall have little to do with Greek musicians. Evidence for the next stage has to be sought from an Alexandrian writer, Claudius Ptolemaeus, while the final stage is found only in the ecclesiastical writers on music. The reason for this significant fact is not hard to find. The battle of Chaeronea in 338 B.C., while crushing the liberties of the Greek states, did in the long run result in a spreading of Greek culture and learning, and the new city of Alexandria gradually became one of the most wealthy and enlightened cities of the known world. The first two rulers founded the magnificent library there, and their successors, whatever faults they had morally or politically, carried on the work of encouraging the love of letters and learning. The seventh Ptolemy, for example, brought from Greece grammarians, philosophers, geometers, painters, physicians, and musicians who taught the Alexandrians all they knew. Under the care of such rulers, Alexandria became the rival of Athens itself and an important centre of later Greek culture. Thus Athenaios records the proud boast that the Alexandrians were more skilled in music than all other peoples, especially in the use of kithara and flute.

From this city came the most important musical writer of later antiquity, the mathematician Claudius Ptolemaeus, who brings out very clearly the modal structure of later Greek music.

We have already described the way in which the various two-octave scales, the *tárai*, arose from the necessity of keeping melodies within the best range of the voice. At first the relative pitch of these *tárai* was not rigidly fixed. Aristoxenos (p. 36) says: 'The fifth part of our science deals with the keys in which scales are placed for the purposes of melody. No explanation has yet been given of the manner in which these keys are to be found, or of the principle by which one must be guided in enunciating their number. The account of the keys given by the Harmonists closely resembles the observance of the days according to which, for example, the tenth day of the month at Corinth is the fifth at Athens and the eighth somewhere else. Just in the same way some of the Harmonists hold that the Hypodorian is the lowest of the keys; that half a tone above it lies the Mixolydian; half a tone higher the Dorian; a tone above the Dorian the Phrygian; likewise a tone above the Phrygian, the Lydian. The number is sometimes increased by the addition of the Hypophrygian clarinet at the bottom of the list. Others again, having regard to the finger holes of the flutes, assume intervals of three quarter-tones between the three lowest keys, the Hypophrygian, the Hypodorian, and the Dorian; a tone between the Dorian and the Phrygian; three quarter-tones again between the Phrygian and the Lydian; and the

same distance between the Lydian and the Mixolydian. But they have not informed us on what principle they have persuaded themselves of this location of the keys. In practice the difference of a quarter-tone or semitone is not serious, but a theorist desiring to find some system in the usage of musicians must fix the relative pitch of the *tróvoi*. This we know from later writers was one of the great achievements of Aristoxenos. He himself in his extant writings only mentions six *tróvoi*, but the result of his labours was to fix at least theoretically a *tróvos* on each semitone of the octave, making thirteen *tróvoi* in all.

Now it is clear that if the only reason for the evolution of the *tróvoi* was the desire to sing all the modes in the best range of the voice, there is no need for thirteen *tróvoi*. One *tróvos* for each mode, making seven in all, would be sufficient. Why Aristoxenos devised a scheme of thirteen it is difficult to say, but possibly he was misled by an excessive desire to systematise the art; for the seven *tróvoi* system would make the Mixolydian and the Lydian a semitone apart while the Lydian and Phrygian would be a whole tone apart. That may have seemed unmethodical to Aristoxenos and led him to introduce his so-called Aeolian *tróvos* between the Phrygian and Lydian and in a similar way to put a *tróvos* on every semitone. At any rate so large a number of keys was unnecessary. The first writer to point this out was Claudius Ptolemaeus, who wrote during the middle of the second century of our era. He himself, to judge by the cold, impartial tone of his work, was summing up the work of many generations of theorists and musicians. A mathematician himself, he had a bias towards the Pythagorean school but he criticises Pythagoras and Philolaos no less than he does Aristoxenos. Possessing a more penetrating mind and a finer judgment than his predecessors he does not leave out of account, as so many theorists do, the practical art of music in his discussions. In spite of his pedantry, his crabbed style and his speculations on the zodiac, his work remains as one of the sanest, most erudite and valuable books on music which we possess.

Ptolemy realized very clearly the real function of a *tróvos* as being not a mere raising or lowering of pitch but a means of bringing all the modes into one compass. The mere realisation of the function of a *tróvos* was as Ptolemy saw sufficient to determine the number of *tróvoi*, but it is characteristic of Ptolemy's thoroughness that he proves his point carefully by an appeal to the actual practice of kithara players. This part of his work is well worthy of a fuller description.

We have seen already that each note of the Greater Perfect System had a name derived originally from the position of the corresponding string on the instrument, but in the course of time the names no longer implied to the theorists the *position* of a string but the *function* of a note in its relation to the other notes of the scale. The *Mese* for example was really the middle string but later it was defined as 'the lower note of the disjunctive tone which lay between the tetrachord *Meson* and the tetrachord *Diezeugmenon*.' There is reason however to believe that the players on string instruments continued to call the lowest string the *Proslambanomenos*,

the highest the *Nete* and the middle one the *Mese*. There were thus two ways of naming and regarding a note, one by its functions in a scale (*κατὰ δόξαμιν*), the other by the position of the corresponding string on the lyre or kithara (*κατὰ θέσιν*). No confusion arose from this duality of nomenclature so long as the kithara was raised or lowered as a whole for each change of *τόνος*; for then the *Mese κατὰ δόξαμιν* would always be coincident with the *Mese κατὰ θέσιν*. But the insistence of Ptolemy on these two different nomenclatures shows that some difficulty did arise in toning (ii. 5). What was this difficulty?

In earlier days it had been found easier to bring a new *αἶδος* into range by means of a *τόνος* than to alter the strings of the mode already in range. That was a matter of practical convenience and, as we have seen, the only reason for the existence of the *τόνος*. Long before the time of Ptolemy however the kithara had been so elaborated that it became possible to raise the pitch of any string a semitone mechanically in passing; that is to say, it was now easier to alter the mode within range than to tune up the whole of the kithara. The effect of this process will be seen better by an example. Take the Dorian *τόνος* :—

B \flat C D \flat E \flat F G \flat A \flat B \flat ' C' D \flat ' E \flat ' F' G \flat ' A \flat ' B \flat '

where the middle B \flat ' is both the *Mese κατὰ δόξαμιν* and the *Mese κατὰ θέσιν* also, and the section F-F' the Dorian Octave (S T T T S T T). If the player desires the Hypodorian mode he has two methods of obtaining it, the old method and the newer one. By the old method he would tune down the whole kithara to the Hypodorian *τόνος* commencing on F and giving the Hypodorian octave-species in both the octaves F-F'. But since the elaboration of the kithara, it was no longer tedious to alter a few strings and the kitharist had at his disposal a very easy method of obtaining the required mode. By raising the G \flat in the Dorian *τόνος* which he had already, he found within the octave F-F' the Hypodorian sequence, T S T T S T T, and the whole scale sized as :—

B \flat C D \flat E \flat F G A \flat B \flat ' C' D \flat ' E \flat ' F' G' A \flat ' B \flat '

The middle B \flat here is still the *Mese κατὰ θέσιν*, but in reference to the Hypodorian *τόνος* it is the 'paranete diezeugmenon κατὰ δόξαμιν'; the lower B \flat is the proslambanomenos κατὰ θέσιν but the 'lichanos hypaton κατὰ δόξαμιν'. In modern terminology, we have here a Hypodorian *τόνος* commencing not on the tonic but on the subdominant. By raising the D \flat in each octave also we obtain a Phrygian *τόνος* commencing on the 'leading note' or seventh degree of the scale. Similarly by raising the other real tonics we obtain other *τόνοι* commencing on a note which is not their real tonic but giving within the octave F-F' a new mode or octave-species.

Ptolemaeus however points out that there are only six notes which we

can raise thus (ii 11), for when we raise the seventh (C), the *Mese* *κατὰ δίεσιν* once more coincides with the *Mese* *κατὰ δίεσιν*, and we have no new mode but only the repetition of a former one a semitone higher. But the object of a new *τόπος* is to obtain a new mode; therefore the eighth *τόπος* formed by raising the seventh note is useless and seven *τόποι* are sufficient. These seven essential *τόποι* are here given with their *Proslambanomenoi* *κατὰ δίεσιν* in ascending order of pitch:—

Hypodorian...	...	...	F
Hypophrygian	...	...	G
Hypolydian...	...	...	A
Dorian...	...	...	B \flat
Phrygian	...	...	C
Lydian	...	...	D
Mixolydian	...	...	E \flat

There is no need to point out at length how decisive the work of Ptolemy is for the contention that modality was the basis of Greek music and the connecting link between that and our own. Ptolemy himself is not an innovator but an energetic scholar who sums up the results of centuries of work. The number of essential *τόποι* must have been realised long before him; he was the first to treat the subject fully. One point however must be clearly understood: the *τόποι* as they existed in practice in the time of Ptolemy were called *τόποι* but actually were modes pure and simple; for the 'scheme' of the *kithara* was changed with the alteration of every string. Ptolemy himself realised this fact but later mediaeval theorists failed to perceive it, as will be seen shortly.

X.

The most vital part of our work is now complete and it should be clear that Greek music was modal down at least to the time of Ptolemy. Few would deny that the modes as we find them in Ptolemy are the basis of the liturgical music of the Church and consequently the ultimate basis of modern music. At the same time it is not an entirely easy matter to thread our way through the theorists of the middle ages and we must be prepared to find there misunderstandings and mistakes which, however interesting they may be, served only to add confusion to an already difficult subject.

The Christian church, whose minor glory it is to have been the musical link between the Greeks and ourselves, had its chief seats in cities which were Greek in culture. We have seen how Alexandria in particular had become one of the greatest centres of Hellenic culture, influencing the whole Mediterranean civilization. Rome too owed a great debt to Greece in music as well as in literature; and whatever the aboriginal music of Italy may have

been, all traces of it were lost by the end of the Punic wars. In the time of Cicero some connoisseurs could recognise the music of Greek choruses after the first few notes had been played.¹⁹ Vitruvius too shows the Aristoxenian theory in vogue in Rome in the time of Augustus. Many of the extant pieces of Greek music date actually from the early Empire and most of the theoretical works were written during that period. As far as music was concerned the Mediterranean civilization as a whole was entirely indebted to Greece.

In this atmosphere of Greek culture the Christian Church grew strong, and it was Greek rather than Hebrew music which became the foundation of the liturgy.²⁰ The influence of music on the spirit was clearly recognised, and in accordance with the advice of the Apostles sacred songs were freely used.²¹ Roman and Corinthian and Alexandrian proselytes were accustomed only to Greek music, and the sacred hymns of the Church would of necessity be based on the kind of music then in vogue. 'Secular and degrading ceremonial forms would naturally have been rejected as unworthy of imitation and models would be looked for in the graver kinds of music, in the hymns to the gods, and the long narrative cantatas of the Graeco-Roman kitharedoi; but it will still remain none the less evident that the music of the Christian ritual, from the nature of the conditions under which it came into being, must for a long time have resembled in its general outlines the music which was going on around it. We should therefore expect to find deeply marked traces at least of the Graeco-Roman practice in the first efforts of the Church. And turning to the oldest Christian compositions, the hymns and antiphons of the Office of which the earliest examples date from the fourth century, we find these expectations amply justified.'²² By this time the diatonic 'genus' had won its way to absolute supremacy. Even in the time of Plutarch the enharmonic was falling into disuse and Gaudencius in the fourth century tells us definitely that both the enharmonic and chromatic had become obsolete.

Perhaps the most interesting link between the Greek times and our own is found in the Water-organ. This instrument was invented by Ctesibius, an Alexandrian and contemporary of Archimedes (280 B.C.). Its use spread rapidly, and Vitruvius gives us a detailed description of it (*De Arch.* x. 8). It was employed early in the Church, and is mentioned frequently by ecclesiastical writers.²³ The early adoption of this instrument may be regarded as a definite indication that Christian music was none other than

¹⁹ *Cic. Acad. Pr.* ii. 7. *Quam multa, quam nos fugiant, in sentis exsultant in eo genere exercitati! qui primo induta thibianis Antiochia esse aliud aut Andronichum unum vel non ne suspicemur quidem.*

²⁰ D. G. Morin (*Les Fecissables Origines du Chant Gregorien*, 1904) would have us believe that the ornamental melodies were Hebrew and anterior to the syllabic music (cf. Gervase, *Les Melodies Antiques dans le Chant de l'Eglise*).

²¹ Cf. Eusebius, *Hist. Eccles.* v. 28. 5; Augustine, *Confess.* ix. 7; John Cotton, *op. cit.* 2; Pseudo, *Gerontion* (Gerbertus, i.).

²² Woodbridge, *Oxford History of Music*, vol. i. p. 25.

²³ Tertullian, *De Anim.* 14; Cassiodorus, *Expositio in Psal. de Indidinis*, *Expositio* iii. 21; cf. *Rev. des Et. Gr.* 1896, p. 23; *Philologus*, 1906, lxx.

the contemporary Greek music; for, unlike the string instruments, it could not be retuned once it was made.

The first important name we meet in connexion with Christian music is that of St. Ambrose, Bishop of Milan about the year 380 A.D. Until quite recent times there was a tradition firmly believed that he took from the Greeks four modes and made them the basis of liturgical music. Such a view is no longer held, but it is undisputed that St. Ambrose did introduce into Europe what is known as antiphonal singing. This style came actually from the Greek city of Antioch, and after the experiment of St. Ambrose, Pope Celestin (422-432) authorized its use throughout the Church.²⁴ St. Augustine in his *Confessions* describes the warming effect of this change on the minds of listeners. But no old writer is found to attribute definitely to St. Ambrose the introduction of Greek *modes* into the music of the liturgy. By the natural sequence of events they had been there from the beginning.

It has already been hinted that the mediæval theorists are confusing and the source of the confusion is to be found in the work of a non-Christian writer, Boethius. For Latin readers he transcribed as best he could the elements of the arts and sciences of Greece, geometry, arithmetic and music. In music he seems to have taken for his basis the work of Ptolemy; but he transcribed Ptolemy so badly that Gevaert doubts whether he knew the Alexandrian work at first hand. Chapters 13 to 17 of the fourth book of his *Institutio Musica* contain the gist of the trouble. He commences by giving the seven species of the octave, first by numbers and references to a diagram, secondly by names. We find that whereas Klonides and other writers give the Mixolydian as the first species and the Hypodorian as the seventh, Boethius has reversed the order. That may of course be a purely arbitrary arrangement but it is very suspicious when we remember that the order of the octave-species is just the reverse of that of the keys (*τῶροι*) (cf. Sect. VII). Has Boethius mixed them up? A glance at chapters 15 and 16 at once convinces us that he has; for his language is vague and the table he gives with a curiously garbled Greek notation for the seven 'modes' is actually a list of the seven *τῶροι* of Ptolemy each extending to two octaves. Furthermore he adds a Hypermixolydian 'mode' marking it as the highest and the Hypodorian as the lowest. This eighth 'mode' (he acknowledges it to be 'incongruum') is explained by saying that Ptolemy added it. As a matter of fact Ptolemy devoted a whole chapter to proving that there were only seven octave-species and therefore only seven *τῶροι* (ii. 9). What has happened? It has already been pointed out that the *τῶροι* given by Ptolemy are really modes even though they retain the old name of *τῶροι*. Boethius seems partly to have realised this fact but failed to see in what way exactly the *τῶροι* of Ptolemy came to be modes. Consequently his list of 'modes' is really a list of the *τῶροι* and as a further result, we find them in

²⁴ Theodorides, op. *Constantinus, Hist. Eccles. Tripart.*, v. 33; Isidore, *Eccles. Offic.* i. 7. 8. *Later Pontificatus*, vol. I. 230.

the reverse pitch order of the 'octave-species' of older theorists. The three lists in ascending order of pitch are:—

<i>Octave-Species</i>	<i>Scale of Ptolemy</i>	<i>"Modes" of Boethius</i>
Mixolydian	Hypodorian	Hypodorian
Lydian	Hypophrygian	Hypophrygian
Phrygian	Hypolydian	Hypolydian
Dorian	Dorian	Dorian
Hypolydian	Phrygian	Phrygian
Hypophrygian	Lydian	Lydian
Hypodorian	Mixolydian	Mixolydian
		Hypermixolydian

A further example of the growing confusion in nomenclature (and consequently in theory) is found in an interesting letter which Cassiodorus, the first Christian writer on music, sent about the year 508 A.D. in the name of the great Theodoric, charging his friend Boethius to choose for the French king Clovis a talented kithara player. In this letter we have mention of five 'toni' with their names and a description of the effects they had upon the emotions of men; and it seems that Cassiodorus is really referring to the modes and not to the keys. As we shall have occasion to remark, later theorists argued at length about the proper word to use, 'modus' or 'tonus'.

Already in the *Institutiones Musicae* of Cassiodorus much of the Church liturgy seems to be fixed; but the only theory which is given is a garbled version of the old Greek one. These early writers seem to have looked definitely to the Greeks as their musical ancestors, but in the actual composition of melodies they modelled their work on concrete examples rather than according to a rigid theory. Violent changes of principle or far-reaching innovations of course played no part in the musical history of this period. The art of composition was conducted along well-worn channels even though the theory was growing dim and confused. After the political events of the last half of the sixth century all real knowledge of the old theory died away and St. Isidore early in the next century can scarcely understand Boethius or Cassiodorus.

From this point until the ninth century we find no musical treatise of any kind though the composition of melodies continued steadily. The silence is broken about 850 A.D. by a certain Aurelian in his *Musica Disciplina*, where a new theory makes its appearance. After a poor account of the old Greek theory he mentions eight 'toni,' four authentic and four plagal. So far as we can judge, during the centuries intervening between Cassiodorus and Aurelian the churches of Asia Minor had evolved for their own convenience a new theory. It was seen that the vast majority of melodies ended on one of four notes. Some melodies never went below these 'Finals,' others went as much as a fourth below. The melodies which did not go below the Final were called authentic, the others plagal. Thus on to the old music a new theory was grafted.

The next and most interesting stage is the grafting of the mistaken theory of Boethius on to the new theory of the modes. Notkerus, a Spanish writer of the tenth century, gives the first indication of it; for in his treatise he gives the eight modes (he does not make up his mind whether they are 'modi' or 'toni') in ascending order as: Hypodorian, Hypophrygian, Hypolydian, Dorian, Phrygian, Lydian, Mixolydian, Hypermixolydian, which are just the modes of Boethius. Thus the lowest of the ecclesiastical modes is equated with the lowest of the pseudo-modes of Boethius.

In the same century, Guido stands alone in refusing to bow down to Boethius whose book is 'of no use to musicians but only to philosophers.' By the end of the eleventh century however the matter has been definitely settled. The modes are now called 'toni' and John Cotton (chap. x.) gives them fully as:—

1. Protus Authentus	...	Dorian	...	(D-D)	Final D
2. Protus Plagalus	...	Hypodorian	...	(A-A)	.. D
3. Deuterus Authentus	...	Phrygian	...	(E-E)	.. E
4. Deuterus Plagalus	...	Hypophrygian	...	(B-B)	.. E
5. Tritus Authentus	...	Lydian	...	(F-F)	.. F
6. Tritus Plagalus	...	Hypolydian	...	(C-C)	.. F
7. Tetralus Authentus	...	Mixolydian	...	(G-G)	.. G
8. Tetralus Plagalus	...	Hypermixolydian	...	(D-D)	.. G

It is noteworthy that the Hypermixolydian is now called the Hypomixolydian and can in no sense be said to be the highest mode (*soprenus*) as Notkerus stated.

In this state the ecclesiastical modes have remained until the present day in the liturgy of the church. The manner in which modern music was gradually developed from them can be found in any work on musical history and need not concern us here. But before leaving the subject however, our results may be seen to advantage in tabular form.

(1) The *είδη* or octave-species are in the reverse order of pitch to the seven *τάξεις* of Ptolemy:—

<i>The είδη ascending</i>		<i>The τάξεις of Ptolemy ascending</i>
Mixolydian ...	(B-B)	Hypodorian ... (commences on F)
Lydian ...	(C-C)	Hypophrygian G
Phrygian ...	(D-D)	Hypolydian A
Dorian ...	(E-E)	Dorian B \flat
Hypolydian ...	(F-F)	Phrygian C
Hypophrygian ...	(G-G)	Lydian D
Hypodorian ...	(A-A)	Mixolydian E \flat

(2) Boethius vaguely transcribed the *τάξεις* of Ptolemy as modes; the ecclesiastical writers gave to the lowest of their 'modes' or 'tones' the name of the lowest of the pseudo-modes of Boethius thus:—

<i>Scales of Boethius ascending</i>			<i>Liturgical Tones ascending</i>		
Hypodorian	...	F	Hypodorian	...	(A-A)
Hypophrygian	...	G	Hypophrygian	...	(B-B)
Hypolydian	...	A	Hypolydian	...	(C-C)
Dorian	...	B \flat	Dorian	...	(D-D)
Phrygian	...	C	Phrygian	...	(E-E)
Lydian	...	D	Lydian	...	(F-F)
Mixolydian	...	E \flat	Mixolydian	...	(G-G)
Hypermixolydian	...	F	Hypomixolydian	...	(D-D)

(3) The Greek octave-species do not as a consequence correspond with the liturgical modes of the same name:—

	<i>Greek $\epsilon\theta\eta$</i>	<i>Liturgical Tones</i>
Mixolydian	B-B	G-G
Lydian	C-C	F-F
Phrygian	D-D	E-E
Dorian	E-E	D-D
Hypolydian	F-F	C-C
Hypophrygian	G-G	B-B
Hypodorian	A-A	A-A
Hypomixolydian	—	(D-D)

What then are the general results of our investigations? Greek music was modal in structure before the time of Plato in the form of the *ᾠμοίαι*; it continued so in post-Aristoxenian times in the form of the *εἶδη τοῦ διὰ πασῶν*; and remained so at least as far as the time of Claudius Ptolemaeus. This modal music became the foundation of the church liturgy and though the underlying theory became obscured during the middle ages, the music itself remained essentially modal. Thus the connexion is not as difficult to trace as some authorities believe or as well defined as others have assumed. While on the one hand it is not a fully documented and demonstrable fact it is on the other hand far more than a hazardous conjecture. As far as we are likely to know, it is, in the main outlines at least, certain and real; and we may without exaggeration regard modern music as the lineal descendant of Greek.

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CORNELIUS NEPOS. SOME FURTHER NOTES.

IN an article published in the last volume of this *Journal*, Mr. How discusses the problems of the Parian expedition of Miltiades and the Battle of Marathon, in the light of recent views. The version given by Nepos of these events I subjected to an analysis in an article published just before the war¹ and I came to certain conclusions in regard to the sources used by the Roman historian. Mr. How agrees with me in accepting the general view that Ephorus is the chief inspiration of Nepos. He refuses, however, to credit Ephorus with any more special knowledge than that which a student of Herodotus might acquire. Ephorus is, in fact, the rationaliser, and a poor one at that, of Herodotus.

The problem raised by Mr. How is whether we are going to accept the account Herodotus gives of Marathon and Paros or the rationalised version of Ephorus. Without hesitation Mr. How accepts Herodotus and rejects Ephorus root and branch. Here I must associate myself entirely with Mr. How in his appreciation of Herodotus but cannot help retaining a preference for some of the elements of the Ephorus-Nepos version of events at Lemnos, Marathon and Paros. Herodotus, it goes without saying, is vastly the better historian as a rule; but his account of this period of history lacks exactly that discrimination and rationalism which he applies elsewhere with such success. Because Ephorus is a rationalist he need not be condemned then and there. To be a rationalist in the fourth century B.C. meant, amongst other things, that one made errors and that one interpreted early history in the terms of later. That Ephorus did this is, alas, only too obvious. But the rationalist of those times had the advantage of being able to examine evidence of authorities which have since perished. In the process many scraps of evidence from such authorities were kept, and the preservation of the rationalist version implies the possibility of the survival of fragments of records which have otherwise perished. I can make myself clear by referring to a few points in the Ephorus-Nepos account of Marathon, Lemnos and Paros. My own view is *en foud* entirely in agreement with that of Mr. How, but in his determination to dispose of Ephorus he has swept away everything which that historian might have bequeathed to us.

Marathon, perhaps the most important battle in antiquity, is the least accurately described. So to-day the modern counterpart of Marathon—the

¹ *Klio*, 1914, pp. 69-90.

battle of the Marne—still remains wrapped in obscurity; as far as I know, there is no complete and accurate account of it. The problem of the cavalry at Marathon, as explained in modern theories, finds a parallel in the sudden decision of Von Kluck to change his direction. The cause of obscurity in each case is much the same; the importance of the result overshadows the events that led up to it. To press the analogy still further, a modern rationalist, writing a history of the Marne, would examine all the numerous theories, even that which attributed Von Kluck's turning to his fear of Russian troops landed at the Channel ports. The modern rationalist, particularly if he were French and not a high military official, would present us with a neat version of the battle with the edges well rounded off. But here and there in the account there would be scraps of new and perhaps startling information. So too Ephorus. In the case of Marathon I take as such scraps: (1) the story that the Greek position was *in ridiculis montium*; (2) the *'nova ars'* by which something approximating to barbed wire supplied the Greek lack of cavalry; (3) the use of their favourable position to prevent enfilade—or in the words of Nepos *'ut montium tegerentur altitudine'*.

The first I accept as good information, whatever its source, because it is entirely confirmed by the evidence of the battlefield. There within easy range of the Soros is a mountain spur (Mt. Agrioliki) between the end of which and the sea—a very narrow space—the Persians would have to pass. Deployed at its foot the Greeks would be masters of the strategy. Safe against encirclement they could strike the Persians on the flank if they attempted to march on Athens, just as Maunoury launched his army at Von Kluck when that general was marching on Paris. The actual beginning of the battle was brought about, I imagine, by the very movement the Greeks had anticipated. A charge from the mountain spur on to the flanks of the Persians would bring about the conflict exactly at the Soros.

The second and third points rest on their own merits. Troops entrenched traditionally employ obstacles. The men of Marathon were none the less heroes if they did so too. They also protect their flanks; if not, they are unworthy of their weapons.

So much for the rationalism of the story. At least it makes the battle a reality. The presence or otherwise of the cavalry is of less importance if the battle proves to be a counterpart of the Marne. All arms, even cavalry, can be destroyed by infantry if caught in the flank. The Persian may well have been fool enough to imagine that his numbers entitled him to treat the Greeks as a contained force and march straight on Athens. If Von Bülow could commit the crowning folly of sending his formations across the front of a great but despised Allied army, it is not unreasonable to press the analogy in the case of Hippas or the Persian leader.

Nothing sufficient to justify this amount of reconstruction is to be found in Herodotus and this much can be said in support of Ephorus; that the three points quoted above are perfectly legitimate information and do not have the appearance of being the product of his inner consciousness.

Mr. How, on the other hand, still adheres to the theory (p. 53) that the battle was precipitated by the division of the Persian forces, a view that relies for its cogency upon the authority of Suidas. I must confess myself to a preference for the outline which is suggested by Ephorus who, if no better, is at least as good evidence as Suidas, and whose view has the additional advantage of agreeing with the lie of the ground.

In regard to the numbers of the Persian army I should be surprised to find the figure given in Nepos of 200,000 infantry and 10,000 cavalry in any rationalist account of the battle. I have visited the field of Marathon twice since the war and feel little hesitation in declaring that the ground available for the battle could barely contain more than five divisions of the British type (20,000 strong each) drawn up in parade order. Even then there would be but little room for manoeuvre. This shows that Ephorus was not such a skilful rationalist as one might believe and that he drew from sources which were at times incorrect as well as correct. In view of the statement of Polybius that Ephorus knew nothing about land warfare² it seems still less likely that he has given us a merely rationalist account of the battle. Had he done so it might well have been unintelligible. As it is, the intelligibility of the account is derived from the new sources from which he drew.

In regard to the Lemnian expedition the Nepos-Ephorus account is again purely rationalist in appearance. I have already dealt with this in my paper referred to above. The divergence in this case between the accounts of Nepos and Herodotus is not great, but what difference there is is marked. In Nepos it is all described in a rationalistic way as part of a policy and not as the wild raid that Herodotus makes it out to be. Mr. How would, I imagine, condemn it as useless and unconvincing rationalism. Fortunately there is in existence an inscription from Lemnos, found in 1910,³ which the finders, MM. Picard and Reinach, attribute to the time of Miltiades. The inscription sets forth a list of Athenian cleruchs and seems to justify the view that the visit of Miltiades either in the first or second instance was part of an official Athenian policy⁴ as described in the Nepos-Ephorus account. Here again we find the rationalism of Ephorus supported by fact. At Marathon it was the facts of nature, here it is the facts of archaeology.

There remains the Parian episode. Mr. How admits (p. 59) that Ephorus 'gives what is on the face of it the more probable story,' but he again considers it as an inference from the account of Herodotus. This may well be so, but it may equally be, as I suggested, that it is an inference from evidence other than that of Herodotus. 'Here, as elsewhere,' says Mr. How (p. 60), 'Ephorus gives us little more than a plausible but shallow attempt to rationalize the biased and defective tradition preserved in Herodotus.' All of

² *ibid.* 25.

³ *R.C.H.* 1912, p. 336.

⁴ The advantages of the policy of holding the Parianelles were much obvious to Athens by the exploits of Richmen and the Lesbian

as Dymetium (*ibid.* vi. 5). The coin types of the Gallipoli postcards of the time of Miltiades support the view that he was acting on authority from Athens.

this may be only too true and we can well picture the luckless Ephorus racking his brains over his Herodotus and hoping for light to dawn in his inner rationalistic consciousness. But, as I suggested above and as the accounts of Marathon and Lemnos seem to suggest, Ephorus had *something* besides Herodotus.⁴ What that something was I suggested very tentatively in my paper. It was there proposed that some independent writer preserved in the time of Ephorus gave an account of the Persian Wars and based his account upon Philaid memoirs. The name of Dionysius of Miletus was suggested as a mere conjecture.⁵ Fortunately for myself I left it in the realm of conjecture because Mr. How's strictures upon the probability of the writer being Dionysius are very convincing. Mr. How has further contributed an important addition to the discussion by showing how Herodotus himself drew from Philaid traditions. But the fact that he drew from Philaid sources as long as they did not conflict with his Alcmaeonid descriptions makes it the more probable that Philaid stories, at any rate, in his time were to be had for the asking; and some such stories, I take it, fell later into the hands of Ephorus whose account, as given in Nepos, cannot, with all its faults, be dismissed as rationalistic moonshine. Its facts at times fit with a most disconcerting exactness into the facts as we know them from other sources.

S. CASSON.

⁴ The Scholiast on Pindar suggests that Ephorus followed Pindar in his account of the Persian Wars. *Geogr. of Syracuse: F.O.H.* I. p. 294.

⁵ See p. 87 of my article.

THE HEROIC *SOPHROSYNÉ* AND THE FORM OF HOMER'S POETRY.

AS Epic is not made by piecing together a series of heroic lays, adjusting their discrepancies and making them into a continuous narrative. There is only one thing which can master the perplexed stuff of epic material into unity; and that is, an ability to see in particular human experience some significant symbolisms of man's general destiny. We do not appreciate what Homer did for his time, and is still doing for all the world, unless we see the warfare and the adventure as symbols of the primary courage of life. And it is not his morale, but Homer's art that does that for us. — LUCILLE ARDENSON, *The Epic*.

I.—THE MODESTY OF DIOMED.

PANDAR has shot his arrow at Menelaus. The truce is broken, and the critics have been fretting for a display of Agamemnon's prowess ever since they heard the promise and incitement of the Lying Dream. Now, at last, they think, Agamemnon will lead the attack, and the story can develop. A king ought not to sleep all night, said the Dream; and now, with the truce broken, and his precious brother wounded, Agamemnon will surely wake up. He does. Then you would not have seen Agamemnon sleeping nor shucking, but very eager to the fight. He left the horses and the chariot . . . and went on foot . . . To the battle! No, to review his forces.

The critics relapse into despondency, while Agamemnon goes his rounds. When he has finished, it is not he, but Diomed, who performs the prodigies and wins the glory. Could anything be more provoking—to a critic who wants to get the Trojans to the ships before anger has had time to eat into Achilles' soul? It is small comfort that Diomed disposes of Pandar. Even here, the critics notice, Homer displays a lamentable obtuseness to the moral issue. Pandar has broken solemn oath and covenant. Yet Homer lets him die without a word of reprobation. They do not notice that Athena guides the spear of Diomed through Pandar's perjured tongue. Is not that better art than a dissertation on punishment and crime?

But Diomed has nobler quarry than Pandar. Egged on by Athena, he actually wounds the goddess Aphrodite, and subsequently overthrows no less a warrior than Ares. Surely unpardonable in Homer to allow mere Diomed to do such wonders when the hero Achilles is to have no nobler victim than the mortal Hector?

But there is another shock to come. Fresh from the overthrow of his divine antagonists, Diomed meets an ordinary though heroic mortal, and

straightway moralises about the impropriety of mortals fighting gods (vi. 128). Has Homer forgotten so soon? Or shall we rather say that the dialogue with Glaukos is a 'patch', originally unconnected with the *Aristeia* of Diomed, and fitted in by some 'redactor' to serve as a transition from the fighting to the quiet homes of Troy?

I venture to think this criticism will vanish into air when once we understand the artistic purpose of the episode. I tremble as I write, because I remember that my friend Dr. Leaf has found between the hero's exploits and his talk to Glaukos 'an inconsistency that admits of no palliation.' Yet I believe there is nothing here to palliate, human nature being what it is, and Athena being, after all, a very mischievous, as well as an ingenious, goddess. It was she who made Pandar break the truce, then punished him for breaking it. It was she who incited modest Diomed to fight and wound her Olympian rivals. For Diomed is really modest. That is why it is appropriate for him, above all others, to win triumphs after Achilles has left the field, while the results of Agamemnon's pride are still impending. It is his modesty that gives significance to the whole episode, including the fight-comedy of the encounter with what Dr. Leaf, in somewhat awestruck language, calls 'the great powers of heaven':¹ and that is why his modesty is stressed both in the prelude, Agamemnon's review, and, in the epilogue, the interview with Glaukos.

The poet who created the *Iliad* worked on a large plan, with no fear of pedants, and with no anxiety to hurry his work to its conclusion. Having first described the quarrel between Agamemnon and Achilles, he has made it more significant by showing us the background of the larger quarrel between Greek and Trojan. He has symbolised the larger issue by pitting Menelaos, the wronged husband, against Paris, the wife-stealer. Menelaos has fought better, but Paris has been saved by Aphrodite. And then, the prelude finished, Pandar has conveniently broken the truce. The stage is cleared for action. Let the fight begin.

Agamemnon, we know, is in the wrong. His *Aristeia* must not come until he has suffered, and has offered some atonements. His confidence must be followed by defeat. Once he has played his part, the Greeks must be pressed back to the ships, there to lose many men and to suffer the last agony of humiliation, before Achilles, whom through Agamemnon they have slighted, returns to change the fortune of the day, to win the victory for them, and to suffer his own tragedy. Once that great movement has begun, there is no room for exploits from Achaean heroes, save Patroklos and Achilles. And yet, if the defeat of the Achaeans is to matter, the Achaean must have a chance to show how wonderful they are. Even without Achilles, fighting only with 'the best man after the son of Pelos,' they must perform great prodigies. So Diomed has his day. But it is equally important that Diomed, however brilliant, should not so absorb our imagination that the

¹ Professor Ridgeway reminds me that Ares and Aphrodite are still regarded as half-barbarous, foreign divinities, not to be treated so seriously as the great Olympians.

subsequent performances of Hector, Patroclus, and above all Achilles, leave us cold. The critics, if they could believe that Homer has a sense of humour, would perceive that Diomed, with all his bravery and his nobility of gesture, is, in fact, engaged upon a series of adventures in which the element of comedy, not tragedy, prevails. It is, indeed, an exploit to wound Aphrodite and Ares. But is it tragically great? Can it compare for tragic greatness with the killing of Patroclus by Hector and the revenge of Achilles for his friend? It is precisely because he must not overshadow Achilles that Diomed is pitted against gods. Because the gods in Homer, magnificent as they are, are less serious, less important morally, than men. Where the gods intervene, except when the main tragedy of Achilles is concerned, they generally bring a touch of comedy.

Lastly, the episode of Diomed, if it is to enhance the effect of the whole poem, not simply to delay the action, must be relevant to the main theme of the *Iliad*. But unless we state that theme correctly, we cannot judge the relevance or the irrelevance of episodes. The theme is not 'the siege of Troy,' but the wrath of Achilles, with all that it implies, both about the siege of Troy, and about human life in all times and all circumstances. Mr. Abercrombie, who speaks with the authority of a poet, has pointed out that 'the whole meaning of Homer' is most clearly indicated in such words as those of Achilles to Thetis: 'Mother, since thou didst bear me to be so short-lived, Zeus . . . should especially have bestowed honour on me.' He has rightly linked these words with Sarpedon's challenge to death: 'Death ends everything so far as he is concerned . . . his courage looks for no reward hereafter. No; but since the thousand fates of death are always instant round us; since the generations of men are of no more account than leaves of a tree . . . he will stand in death's way.' The hero, in fact, is one who 'knows himself' to be a mortal man, and who is therefore brave and generous. Achilles has chosen honour and a short life rather than normal undistinguished prosperity. Honour is his chief motive and his honour has been outraged by Agamemnon. Therefore he withdraws from the fight. But as the days pass, he becomes bitter. His just indignation passes into excess. Agamemnon, in defeat, will pocket his pride, and offer generous amends. Achilles will refuse, and put himself in the wrong. Then, in the sequel, he will let Patroclus take his own place and face Hector and be killed. In his remorse and fury against Hector, Achilles will forget his grudge against Agamemnon, and will forget what is more important, the solemn decency of the Homeric warrior. The measure of his passion is the measure of his love for Patroclus; but its result is tragic. At the end Achilles, too, will realise that he is only a man. Priam and Achilles together end the drama. The old king recognises in the murderer of his sons a man, with simple human relations, with human sorrows, like himself. And Achilles recognises in Priam an old sad man. 'Know thyself' said the later Greek morality, 'and knowing that thou art mortal, be moderate.' That is the spirit in which Homer makes his poem end with the meeting of the enemies, and makes Achilles think of his own father Peleus as another Priam.

Alas, unfortunate!² Indeed the sorrows you have had to bear are many. And your courage—to come alone to the ships of the Achaeans, to face the eyes of him who has killed your many good sons—your heart must be of steel.³ Nay, sit you down, and let us leave our griefs to be stored up in our hearts, in spite of all our grieving, since in chill lamenting there is no avail.

This is the fate that the gods have apportioned for us poor mortals, to live in sorrow: the gods alone have none. There are two jars that stand in the house of Zeus, filled with the gifts he gives, the one with evil gifts, and the other with good. He for whom Zeus the Thunderer mingles the gifts, sometimes encounters evil, but sometimes good; while he to whom Zeus giveth only of those bitter gifts, is made accursed, driven by evil hunger over the earth, a vagrant and an outlaw from gods and men.

So to my father, Pelcus, the gods gave splendid gifts from his birth up. He surpassed all other men in happiness and wealth. He was King among the Myrmidons, and though he was but a mortal, a goddess was made his bride. Yet upon him also the god laid on evil. No race of princely sons was born in his halls. One there was, born out of due time: and I, who am that one, instead of tending him in his old age, sit here at Troy, very far from my fatherland, troubling you and your children.

And you, sir, too—we hear that in other days you too were happy. Through all the lands between Lacedaemon, Phrygia and the great Hellespont they say that you, sir, were pre-eminent, surpassing all with your wealth and your sons. And now, because the gods of heaven have brought this for your sorrow, always about your city are battles and the killing of men. Bear up. Give not your heart to insatiable lamenting. You will not avail at all by grieving for your son. You will not raise him from the dead—ere that you are like to live and suffer some fresh evil.

It is no accident that the *Iliad*, which began with the wrong done by Agamemnon to a suppliant old man, ends with the right done by Achilles to the helpless Priam. Nor is it an accident that, at the moment when he comes to 'know himself'—to recognise in the sorrow of Priam the common human lot to which he himself is subject—Achilles speaks of the best that we poor human creatures can expect, as not perfect happiness, but a due admixture of evil and of good. I submit that, in the episodes of Diomed pitched as it is (and should be) at a lower level, the poet has not failed to give us something relevant to the great issue of the poem as a whole, the issue of our tragic and yet splendid destiny, our mortality, with its mixture

² *Iliad*, xxiv, 518-551.

³ 521: 'your heart must be of steel.' See xiii, 357. Hector's last words are recalled. When Achilles has told him that not even if

Priam seeks to ransom the body, will he give it back, Hector replies 'Your heart is of steel.'

of good and of inevitable evil. The terms of the analogy will be Greek, not Christian. We shall hear of *Aidôs*, not of faith, hope and charity.

Go back to Agamemnon, reviewing his troops. See how this general, brazen-helmed—I had almost said, brass-hatted—treats his subordinates. No one, I think, who has had experience of military methods will complain of this high comedy, which the critics criticize precisely for the incidents which make it true. Watch Agamemnon as he gives his 'many instructions' to his orderly: then listen, as he walks through the ranks to his words of encouragement for the brave—'The enemy are liars, treacherous oathbreakers, and we shall have them!'—or his reproaches to the slack—'Have you no Shame?' That is the first suggestion in this episode of the theme of *Aidôs* (iv. 242). Hear how he praises Idomeneus and his Cretans: note that he honours more in the fight, or at other business, or at the feast; and name to whom he gives more gracious favours. That is a touch of the inspecting officer's authentic character. He passes on, 'rejoicing,' to the Ajaxes. He will not urge them to the fight: no need of that: he only wishes all his men were like them: then it would be a simple matter to take Troy. He leaves them, and moves on—to Nestor. Nestor, we know, is an old officer, an expert, we are assured, in tactics, but loquacious, as old men sometimes are. Agamemnon finds him, as we might have known, haranguing his troops on the importance of co-operative movement—and Agamemnon 'rejoiced,' but could not help observing that he wished the old man were as sound in wind and limb as he is stout in heart. But not old age, 'the common lot,' has its effect. Nestor replies that old age has its merits. It is pre-eminent in counsel and speech. 'The gods do not give men all things at one time. I was young and am old. But even so, I will take my place in the cavalry and give instruction and command: for counsel is the privilege of old age.' The theme is a common variant of the doctrine of human limitations, applied here with a touch of comedy. But its use is relevant to the poet's design. Agamemnon is himself the victim of presumptuous folly. That fact lends point, for us, if not for the inspecting officer, to Nestor's hint about the wisdom of old age. We seem to have heard that Nestor, when Agamemnon told his famous dream, and expounded his famous plan for 'testing' his army, left the Council without expressing his opinion on the latter topic.

However that may be, Agamemnon comes at length to the Athenians, the Cephallenians, and the ingenious Odysseus. Odysseus is not hurrying, but is wisely and deliberately waiting to see what happens, where it will be best to intervene in the fighting. But the inspecting officer sees his chance, and takes it. He upbraids Menelaos and Odysseus. They are always first at the feast. Ought they not to be first in battle too? Odysseus answers with a very striking phrase. Let Agamemnon wait until battle is joined: then he will see what 'the father of Telemachus' is worth. The commanding officer apologises, being after all a decent man at heart. Then so we come to Diomed.

When critics talk of Agamemnon's 'inexplicable' rudeness to Diomed,

they forget what the inspecting officer has already experienced. He is getting tired and bored. The interviews with Nestor and Odysseus have taken toll of his nerves. If Odysseus brags that 'the father of Telemachus' will show his worth, Agamemnon can at least tell Diomed he is not the man his father Tydeus was. If Nestor snubs young Agamemnon with his talk of the grand old days, the good old methods by which 'the men of former times sacked cities,' he sure Agamemnon will have a word for the youth of Diomed. When an old Staff Major has reminded the inspecting General that the latter is too young to remember the Mutiny, the General will look round for a young subaltern whom he can still impress by talk about South Africa. Diomed is to know that Agamemnon knew his father. What Tydeus did, is to be related in true Nestorian vein. And the conclusion is that Diomed is not the man his father was.

It is all very unfair; but precisely that fact makes it genuine. The Agamemnon of this episode is the man who insulted Achilles. But it is for Diomed's sake that the poet has composed the little comedy. To Agamemnon's insults Diomed returns no answer. His modesty respects Agamemnon's office (*aideōdai*, 402). But Sthenelos has a word to say, and a word that is much to the point: 'Agamemnon, do not lie; when you know quite well what is true.' When Agamemnon started on his tour, he was declaiming about victory because Zeus would not help such liars as the Trojans (235). Well, Zeus has a lesson in store for Agamemnon. Sthenelos and his generation captured Thebes with a handful of men, because they trusted in the portents, and because Zeus aided them, whereas Tydeus and his fellows 'perished by their own folly and pride.' It is an admirable retort, and gives a fine opportunity to Diomed to show his Aids, by reminding his subordinate of discipline. 'Silence,' he says, 'be quiet and take your order from me. I have no complaint against Agamemnon. His will be the glory if the Achaeans win, and sorrow if they lose. Our business is to fight.'⁴

That is the prelude to the exploits of the son of Tydeus. I submit that it is relevant to the main theme of the *Iliad*. Achilles was outrageously insulted by Agamemnon, and tragedy was the result. Diomed is insulted, too, though of course the insult is not comparable in importance. But Diomed will make no protest. His business is to fight. If the episode of Diomed was once an independent poem, it is a miracle that his character should have been so admirably conceived as a foil to that of Achilles.

When we turn to the actual fighting, the miracle, if miracle it be, not art, is repeated. There is a reference, at iv. 512, to the absence of Achilles, duly rejected as a late addition by the champions of an independent poem about Diomed. But consider the context. Odysseus, by a sudden rally, has shaken the Trojan ranks. And what brought Odysseus into the field?

⁴ Agamemnon's treatment of Achilles has undermined the discipline of the army. The 'testing' and the Thersites episode illustrate

that fact, and heighten the effect of Diomed's behaviour.

A certain Antiphos, a son of Priam, had aimed at Ajax, missed his mark, and hit and killed 'Leukos, the excellent companion of Odysseus. And Odysseus was very wroth for his comrade that was killed' (484). Can you help thinking of Achilles and Patroclus? And if you think of them, is it not due to the poet's skill, which is preparing you to hear Apollo's shout, 'Up, Trojans; do not yield . . . Achilles, son of Thetis, is not fighting'?

But others are fighting well enough, and Diomed best of all, till he is wounded by an arrow from Pandar. Nor does that stop him. He invokes Athene, and she comes to him with a promise worth the hearing, and an astonishing command. The promise is that he shall prove as fine a fighter as his father. We have not forgotten Agamemnon's insult. And the command is this, that Diomed, the modest, who because of Aïdôs, would not resent his general's injustice, shall stand and fight Aphrodite, should she cross his path. After that, no wonder that short work is made of Pandar. Then, Pandar disposed of, Diomed is on the point of killing Aeneas, when Aphrodite intervenes. She gets her wound and goes. In Olympus the poor lady is consoled by Zeus, her father as well as ours, in language that recalls the lessons always used to comfort and inspire our own poor suffering mortality. Read his whole speech (especially 405-415), and consider whether the poet did not mean you to think of Hector and Andromache, of Thetis and Achilles. And when Zeus bids Aphrodite recognise that 'the work of war is not a gift that has been given her,' and that her own lovely business of marriages is far preferable, do we not hear an echo, humorous, but beautiful, of old Nestor's talk about the various gifts of the gods to men? I must leave the reader to judge. But I must note, in passing, the complaint of Aphrodite to Ares at line 361: 'A mortal man has wounded me, the son of Tydeus, who would fight now against the Father, Zeus himself.'

Would he? Has his exploit robbed him of his modesty? Almost, I think, it has; not quite. Back he goes to the attack, 'though he knows that Apollo himself is shielding Aeneas with his arm.' Diomed 'respected not that great god, but was bent on killing Aeneas.' Thrice he attacked, and thrice Apollo thrust his spear away. But the fourth time, when he 'rushed on like a daimôn,' Apollo shouted terribly,

'O son of Tydeus, cease! Be wise, and see
How vast the difference of the gods and thee.'

And the son of Tydeus heard and 'withdrew a little,' for he avoided the wrath of the farshooter Apollo. Modesty, to that extent, had survived the test of victory. So Apollo puts Aeneas into safety and himself retires, but eggs on Ares to confront this brilliant mortal, using as a taunt to spur him into energy the very phrase which Aphrodite used before, 'The son of Tydeus would fight now against the Father, Zeus himself.'

That Diomed, in his relation to Agamemnon, is a foil to Achilles, we have already seen. In the adventure just described, he is a foil also to Patroclus. When Patroclus at last has won his friend's consent, and is about

to enter the field, Achilles bids him drive the enemy from the ships, but not too far. He is not to let the glory of the battle turn his head. He is not to drive the Trojans up to Troy, because a god may intervene. 'The far-worker Apollo loves them very much' (xvi. 94). With that hint to guide you, follow Patroclus through his tragedy. Observe how modest he is at first. It is for the honour of Achilles, not his own, that he will fight (270). After his first successes he still recalls Achilles' warning (395). But presently there comes a change. At line 616, Aeneas, who has aimed at Meriones, and missed, is furiously taunting his opponent: 'Meriones, my spear would have finished you, although you are a dancer, had I hit you.' To which Meriones replies with another taunt, but couples it with the reminder: 'You, too, Aeneas, are a mortal man.' At that point, in words which illuminate his character, Patroclus intervenes. He rebukes Meriones for wrangling when he ought to fight. Battles are won by fighting. Words, mere words, are meant for the council-chamber (630). Now watch the sequel. Not many moments pass before Patroclus 'falls into great folly' (*μέγ' ἄδωδον ὀϊστής*, 685):—

For had he observed the words (*ἔπος*, cf. *ἔπειτα*, 630, 386) of the son of Peleus, he would have escaped the evil fate of black death. But ever is the mind of Zeus more powerful than that of man, and Zeus it was who stirred his spirit in him.

The gods are calling Patroclus to his death (693), and they give him not only a full measure of glory at the end, but also a spirit of unreasonable daring.

Patroclus would have captured Troy had not Apollo intervened. Thrice he assailed the walls and thrice Apollo thrust him back. But the fourth time, when he rushed on 'like a daimōn,' Apollo 'shouted terribly.' And Patroclus withdrew 'a long way,' because he would avoid the wrath of the bowshooter. Then Hector came and Patroclus faced him. With a great aim he blinded Hector's charioteer, who fell, like a tumbler, to the ground. Patroclus taunted him as Aeneas had taunted Meriones: 'Fit, you are very light of limb, how easily you turn your somersault. You have tumblers, I see, in Troy.' So, when the sun was passing from noon towards the hour or rest from toil, Patroclus leapt upon the Trojans with evil purpose. Thrice he leapt on them, like swift Ares, shooting horribly, and thrice nine men he slew. But when for the fourth time he rushed on, like to a daimōn, then the end of life came to Patroclus: Apollo met him in the midst of the battle, terrible, 'and he did not see him as he came.'²

Has Diomed dwarfed the exploits of Patroclus? Are the differences and analogies between the stories the result of accident or of the clumsy imitation of a rhetor, or of art?

Let us return to Diomed, whom we left at the end of his first adventure. When the second begins, Apollo has departed, Hector has joined battle, and

² I am indebted to Mr. D. S. Robertson for distinction. Diomed saw Apollo; Patroclus pining out to me the importance of this did not see him.

the Greeks are back on the defensive. By the kind of repetition which Epic loves and which Homeric critics rarely understand, the new episode begins with a reminiscence of Agamemnon's grand review. 'There stood the two Ajaxes and Odysseus and Diomed, urging on the Greeks to fight . . . and the son of Atreus went up and down the ranks, with many an exhortation:—

'Ye Greeks, be men! The charge of battle bear;
Your brave associates, and yourselves revere!'

αἰδομένοισιν ἀνδράσιν ἐλαόεντι σθένι . . .

Hector is now visibly helped by Ares, and Diomed, when he sees it, true to his character, retires. He fights and makes others fight, but not against a god (600). Athena intervenes again. Diomed is beginning to feel his wound and needs a strong incentive. She hits on a good theme. Agamemnon talking about Tydeus need not, perhaps, be taken tragically: but now Athena, his goddess, who so lately praised his valour, tells him, 'You are not like your father. Tydeus was a little man, but he could fight. He fought, indeed, and won, when I myself advised him not to fight.' In the same breath she orders him to seek out Ares, whom he has so piously avoided. And he obeys and wins again.

Once more, I submit, his modesty is to be subjected to a test. The gods retire and mortal men are left alone to shift for themselves. After his triumph over Aphrodite, Diomed was tested by Apollo, and found not altogether wanting. Now, after a greater triumph, there comes a human test, more serious, as we have said, precisely because it is human. Diomed meets Glaukos. But before the interview, two incidents occur, both relevant and psychologically important, though the first is generally ignored and the second generally condemned by critics. The first is the little episode when Menelaos takes a man alive and thinks of sparing him, but Agamemnon will not bear of mercy. That is meant to prepare our minds by contrast for the exquisite humanity of the intercourse between Diomed and Glaukos. The second is the withdrawal of Hector from the field, not for tactical convenience, but for pious motives. He goes to bid his people pray. Athena to divert the rage of Diomed, who at this moment seems more terrible than Achilles himself. And no sooner has he gone than Diomed meets Glaukos. Remember how in the sequel Hector prospers while he remains modest. Remember how he is advised by the wise Polydamas; think of the omen which he disregards, because he trusts to Zeus, and because the best of omens is to fight for the fatherland; then think how the modest Hector changes, and prides himself on the supposed patronage of Zeus, and finally how, in the crisis of his destiny, his honour will not let him go. He has to die because, as he remembers, by rejecting the good counsel of Polydamas, he has brought trouble on his people. All that has yet to come. For the present Hector is not ripe for glory and for death. For the present he takes good advice, and the Trojans reap the benefit.

Diomed's interview with Glaukos is, on its lower level, a counterpart and prelude to the final scene of human reconciliation between Priam and

Achilles. We have seen the modesty and the achievement of Diomed, when confronted with the gods. Now he meets an antagonist he does not recognise, whose aspect is so noble that he may well be more than human. That is the situation. Is it 'an inconsistency admitting of no palliation' for Diomed to say he will not fight against a god? And is his reference to the story of Lyeurgus and Dionysus inartistic and irrelevant? Before you dogmatise about it, see if the reference to Thetis in line 136 does not make you think instinctively about Achilles.

To Diomed's question whether he is a man or an immortal, Glaukos answers in a famous *rêsumé* :—

Great-hearted son of Tydeus, why seek my lineage? As is the generation of leaves, so is the generation of men. The leaves are scattered to earth by the wind, and others are put forth on the living tree when the season of spring returns. So one generation of men grows, and another ceases. Yet, if you wish to ask and know our lineage, it is well known to many. There is a city Ephyræ, in the centre of horse-nurturing Argos, where once lived Sisyphus, most crafty and most gainful of men.

So Glaukos tells the splendid story of his ancestors, and Diomed, when he hears it, knows that Glaukos is by ancestry a guest-friend of his own. He fixes his spear in the ground and 'with gentle words' greets the new friend who is fighting for his enemies :—

I therefore am your dear host in Argos, and you are mine in Lyræia, when I shall come there. Let us avoid each other's spears in the press of battle. I have many Trojans and many of their glorious allies to kill, whomever the god deliver to me, and I catch. And you have many Achæans to kill and strip, whomever you are able. Let us exchange our armour that the rest may know we boast that, through our fathers, we are friends.

It is for this moment that we have been prepared by all the harping upon Tydeus. The fact is relevant to the question whether this poem was intended for its place in the tragedy of Achilles, son of Peleus, and Hector, son of Priam.

So they leapt down from their chariots and clasped hands, and pledged their friendship. And Zeus the son of Kronos robbed Glaukos of his sense. For he exchanged his armour with the son of Tydeus, giving gold for bronze, the worth of a hundred oxen for the worth of none.

Here at least the critics, though reluctantly, admit 'deliberate humour.' But how many of them notice the deft reference to Glaukos' boast that he is son of the craftiest, most gainful man on earth? The truth and subtlety of this touch has a quality which only the authentic Homer has been known to achieve. The secret of his humour, as of his splendour and his tragedy, is

found in his personal, imaginative, view of life. The poet who sent Chryses on his errand to the son of Atreus, is the poet who conducted Priam to the tent of the son of Pelasus. And the poet who made Diomed's exploits culminate in the meeting of the enemies who yet were friends, is the same who made Peleus bid his son trust Hera and Athena to give him strength, but 'to hold in check his passion in his breast, for loving-kindness is better' (ix. 254); the same who made Achilles cry, when Zeus had granted his prayer for honour, 'He has granted it: but what pleasure have I from it, since my dear friend is dead?' This was the poet who, at the end, brought together Priam and the man who killed his sons. One of the most wonderful speeches in Homer, and one of the most appropriate to our present theme, is this, spoken by Achilles to Lykaon, one of Priam's sons whose life he had spared, but who had fallen again into his hands (xii. 99):—

Poor fool, show me no ransom. Give me no talk. Before Patroclus met his day of destiny, my heart was glad to spare the lives of Trojans. Many I took alive and sold for a price. But now not one shall escape death, not one of all the Trojans whom the god puts in my hand, and above all, not one of Priam's sons. Nay, die, my friend. Why do you weep? Patroclus died, and he was far better than you. Do you not see how tall I am, how beautiful? A noble man is my father, and a goddess my mother. Yet death and violent fate will come for me, be it morning, evening, or noon, when one shall take my life from me in battle with his spear or with an arrow from his bow.

'Die, my friend.' Achilles kills his victim, yet even in the crisis of his agony and wrath, he is at one in his mortality and in that strange friendship with his enemy. That is what poetry can do with the commonplace of the Greek notion of *Sophrosyné*. This was the vision which inspired and dominated the ancient world. As late as the fifth century of our Christian era a bad poet could pay this tribute to Homer, in a description of his statue:—

'Bald are his temples. Yet upon them rests
The source of Youth, *Sophrosyné*. The eyes
Are sightless. Yet dath cunning artistry
Shade them with brows projecting, and the face
Is not a blind man's. In the empty orbs
Is beauty, and I think the artist means
To tell us that the poet's heart is lit
By Wisdom's inextinguishable flame.
The cheeks, a little touched by withering age,
Are sunk a little, yet remain the shrine
Of Beauty's partner, native Modesty.*

* Christodorus of Thebes: *Taton*, J.F. vol. i. p. 84.

II.—THE EDUCATION OF TELEMACHUS

The introduction to the first book of the *Odyssey* has been severely criticised. Complaint is made, first that the poet does not mention many quite important episodes; then, that he does mention such a trivial matter as the eating of Hyperion's cattle. The truth is, the poet does not want to give a summary of contents, but to concentrate attention on his hero, and incidentally to strike the first significant notes of certain themes which will recur throughout the poem.

Again in the second paragraph, it is suggested that lines 16-19 'interrupt the train of thought.' But there is a simple explanation. Editors print a full stop after *φίλοιαι*, where there ought to be a comma, and fail to see that the sentence *οὐδ'—ἔνθα φίλοιαι* is parenthetic and the *δὲ* after *θεοῖ* apodotic. The sense, which is not really interrupted at all, is as follows:—

When, among the circling seasons, the year came, in which the gods destined his return to Ithaca—though there too, among his own people, he was not escaped from labours—then all the gods pitied him except Poseidon. But Poseidon was implacable against the god-like Odysseus until the very moment when he came into his own country.

That is important for the whole artistic structure of the *Odyssey*. The gods did not worry about the hero before, because it was his destiny to wander for a certain term of years. Poseidon wanted to interfere to the last possible moment, but the other gods began to pity Odysseus as soon as the destined year arrived. Even so, however, there were labours awaiting him at home.

Having set that matter right, consider what these two paragraphs contain. First comes the memorable description of the hero, his resourcefulness, his wanderings and sorrows, and the knowledge which he gathered as the fruit of his experience. Grouped with their leader, but contrasted, are the companions whom he could not save because of their own folly. The reference to Hyperion's cattle points the contrast. Then, in the second paragraph, we learn the situation at the opening of the action. The hero's home and wife are worked into the pattern. Penelope is set against Calypso, 'who desired him for her husband.' Finally, when the year of release arrived, the gods, except Poseidon, pitied him, but even among his own people he was not altogether escaped from labours. The whole prelude is intended to throw Odysseus into sharp relief; and for that purpose his name, suppressed at the outset, emerges admirably at the end with the epithet *ἀντίθεος* to make it splendid.

Nothing, so far, directly, of Telemachus or the suitors, though their existence is implied by lines 18-19. But we shall see, when the story begins, that the foundations have been well and truly laid.

Poseidon has gone to the Ethiopians, and the other gods and goddesses

are assembled in the palace of Zeus, when Zeus begins to discourse . . . of Odysseus! No, of the noble Aegisthus, and how he brought trouble on his own head. An excellent opening, of course, for Athene, who points out that Odysseus does not deserve his troubles. But that is not the only purpose of lines 28-43. The contrast between Agamemnon and Odysseus, Clytemnestra and Penelope, is not forgotten in the sequel; nor is the comparison between Aegisthus and the suitors. For the suitors, Athene's 'So perish any other whose actions are like his,' is ominous. The stress laid here on the warnings heard and disregarded by Aegisthus is artistically the prelude to the many warnings given in the sequel to the suitors, to the comrades of Odysseus and even to the wicked maidservants. All these perished: by their own wicked folly. The story of Agamemnon and Aegisthus plays in the structure of the *Odyssey* a part analogous to that of Croesus and Solon in Herodotus. Herodotus indeed was elaborating Homeric methods. The apparently irrelevant reflection of Zeus on the fate of Aegisthus states, in fact, the central doctrine of the Odyssean view of life:—

Fie! What a thing is this, that mortals blame the gods! They say that evils come from us, whereas it is partly they themselves who by their own wicked folly, have sorrows more than their allotted portion.

It is not part of this religion to ascribe all good and evil to the gods, nor yet to men. Simply, men make trouble for themselves beyond their portion. So did the companions of Odysseus and the suitors. So did not Odysseus. Aegisthus did . . . and Orestes, 'when he comes of age,' takes vengeance for his father. It is thus indirectly that the poet introduces Telemachus, and links him with his father, through Orestes.

When Athene seizes her chance, she takes up Zeus's *ὅστις μέγας* with her *ἀντιπαρὸν* (40). The very portion of Odysseus is evil, though he is so wise, and also lavish in his sacrifices. Zeus courteously admits the force of both her arguments:—

How should I forget Odysseus, who surpasses other men in good sense, and has given more sacrifices than others to the immortals?

Accordingly divine machinery is set to work: Hermes shall go 'later on' with a message to Calypso, and Athene sets out at once for Ithaca to put 'spirit' into the heart of Telemachus.

Her visit is for Telemachus the beginning of his education, and to that process the themes of our introduction will prove relevant. Telemachus is to acquire both self-reliance and discretion, as a worthy son of Odysseus. He must be bold but modest, self-confident but cunning, like his father. His inspiration is to come in part from the thought of his father, in part from his father's presence and example. In the earlier stages Orestes will recur as a type and an example for his emulation. Above all, the doctrine stated at the outset by Zeus implies the wisdom that Telemachus has to learn. Men blame the gods, but men themselves are partly responsible. Telemachus is to learn that among our troubles, some come from destiny, the gods, or circumstances, and have to be borne bravely; but others we can master, with

the help of the gods, and also by believing in our own strength and by using it.

Athene plays upon these themes. The youth's depression is shown by the brevity of his greeting. He believes his father is dead, and he thinks reports to the contrary no longer give him any comfort. Athene knows better. Very skilfully she wins his confidence by showing that she is well informed about Laertes, then wakens hope by boldly stating that 'she had been told' Odysseus was in Ithaca. Could there be a better preface to her 'divination' that the hero is not dead? Finally, she moves the emulation of the boy when she tells him that his father will come back 'even if he is held in iron chains. He will think of a way to get back, for he is a man of many devices.' I say that this is intended to stir emulation. It comes immediately before the question, 'Are you his son? Has he a son so old? You are wonderfully like him, your head, and the fine eyes.' There is no resisting such flattery, and there is a touch of Odysseus himself in the response, 'My mother says that I am his son, but I for my part do not know.'

She leaves the topic and plays on another emotion. She will make him angry with the suitors. She pretends not to understand the situation. What, she asks, is the occasion for this junketing? And are not the guests exceeding the limits which 'a man of sense' would observe? He responds to the directness of the challenge and states his troubles frankly. That is the first step towards a remedy. But, like the persons of whom Zeus talked in the prelude, he puts all responsibility on the gods. The house may once have been rich and happy, but 'the gods, devising evils, willed otherwise.' And the gods are responsible for the suitors too (234, 244). 'O fie!' cries Athene, 'Need indeed you have of Odysseus, to lay hands on the insolent suitors?' Is it an accident that her appeal begins with the same *ὦ πόποι* with which Zeus began his criticism of complaining mortals? Her whole speech is an appeal for action instead of weak complaining. Her picture of Odysseus with his helmet, shield and spears, will be remembered by her hearer; then, with a sudden shift from languor to dramatic energy she breaks off (239): 'All this lies on the knees of the gods . . . but, as for you, I bid you think of a way to drive the suitors out of the house.' Odysseus, we remember, 'will think of a way to get back, even if he is in chains. And now, 'all this is on the knees of the gods,' *σὲ δὲ φράζεσθαι ἀνδρῶν*.

Telemachus, then, is to distinguish between the things that he cannot help and the things that he can do. He is to be a man and put away childish things (296). He is to act instead of repining. Has he not heard of the fame that was won by Orestes (298)?

Athene has accomplished her purpose. She will not stay even for a present, though that potent argument is urged. Telemachus is ready for his first ordeal. He thinks he has entertained a god:—

ἀντίκα δὲ μνηστήρας ἐπέχετο ἰσθίονος φῶν.

We noticed how the poet introduced the name of Odysseus for the first time with the epithet *ἀντίθεος*. It is Athene's talk about Odysseus that has

made Telemachus deserve a similar description. Precisely at this moment the minstrel begins to sing, and his theme is the return of the Achæans, 'that grim return, which Pallas Athene enjoined for them from Troy.' No wonder the youth listens with different emotions from those which bring Penelope down from her room. No wonder, when Penelope interferes, Telemachus asserts, for the first time in his life, his prerogative as a man. It is a new vision of life which makes him able to perceive that his mother's objection to the song is sentimental. A man must face the facts. It is not the singer's fault that the facts of life are tragic. The reference to Zeus, 'who gives what he pleases to mortal men,' comes with peculiar aptness, yet with a suggestion almost humorous, in view of what we have already heard from Zeus himself. Telemachus is trying to behave as a grown man should: he uses the arguments of normal Greek morality, and his mother 'stored up in her heart her son's discerning word.' Yet there is a touch of immaturity, even of priggishness in his speech. He does not understand his mother. He is not yet of age.

The immediate sequel illustrates both his new spirit and his immaturity. Athene told him to appeal to an assembly of his father's peers. She did not tell him to blurt out his intention beforehand. The boldness at which the suitors marvel is not, perhaps, very wise; and, indeed, beneath the bravery, there is weakness. His father would never have spoken line 396. And the speeches of Telemachus at the next day's assembly show the same mixture of essential bravery with timidity. The appeal to Ithaca fails, but it has started Telemachus himself on a path from which there can be no return. His relations with the suitors can never be the same. For his own education it was essential that he should find the courage to protest. And the appeal to the gods is, after all, a matter of some practical importance. It puts Telemachus right and the suitors wrong. Still, Telemachus thinks the assembly has been a failure. He has little enthusiasm for his voyage. What is the use of visiting his father's Achæan friends? He has got no help from the Achæans at home! As usual, Athene has the right answer. If he is really his father's son, he will find the necessary courage and intelligence for success. She insists, we notice, on the need for these two elements of character (ii. 276), and she recalls the jest first made by Telemachus himself when she tells him he will fail if he is not his father's son.

For the present, however, it is best for him to forget the suitors and to see the world. Before he goes he meets Antinous, to whom he had spoken so weakly on the day before; and now he shows his quality. As he snatches away his hand, he says (ii. 314):—

οὐδ' ἔτι δὴ πόδες εἶμι καὶ ἄλλαι μίθου ἀκούω
 παύσσωμαι, καὶ δὴ μοι δέξεται ἰσοδάμει θυμός,
 παρῆσθαι γὰρ ἔδμεν κακῶς ἐπὶ σῆρας ἰέλω.

That precisely describes the stage he has reached. His travels are to carry him beyond it. They are to touch him much, not only about Odysseus, but also about manners, and the cities and minds of men. And in accordance

with the normal methods of Homeric art, our old *modèle* will still provide the basis of his education. When he arrives at Pylos, he hesitates: How shall he find words, inexperienced as he is, and how find courage, to address old Nestor? Athena's answer is that he must do part of the thinking for himself, and leave part to the gods (iii. 26):—

Τηλέμαχ', ἄλλα μὲν αὐτὸς ἐν φρεσὶ σῆσαι νοήσεις,
ἄλλα δὲ καὶ δαίμων υποθήσεται . . .

That is a light allusion to the central theme. The part of Nestor in the education of Telemachus is to assure him that the gods will help him if he helps himself. Orestes is again to be the inspiration. Nestor mentions him wrothly, as a tactful challenge to his guest; and Telemachus feels the challenge. How gladly would he emulate the model, if he only had the strength. But the gods have not given him such happiness. To which Nestor has an answer full of encouragement. If Athens only were to care for Telemachus as she used to care for Odysseus! Never was such devotion! Well, Telemachus knows that Athena is with him. That much he has already guessed. But he is still weak in faith. He thinks he could not beat the suitors even if the gods desired it. Nestor's rebuke is famous (iii. 231):—

μῆτι θεὸς γ' ἐθέλων καὶ τηλόθεν ἄνδρα σάωσαι.

The one thing the gods themselves cannot do is to exempt us from the common lot of mortality. The effect of this on Telemachus is characteristic. 'Let us talk of something else . . . Tell me how Agamemnon died.' That shows us how he is haunted by the thought of Orestes. And Nestor knows it. How skilfully he leads his story to the point when he can say, 'Orestes has slain Aegisthus . . . and that very day Menelaus came home.' How tactfully he slips away from the implied reminder of Odysseus. And Menelaus brought with him much treasure. So you, my dear, do not stay a long time wandering away from home, leaving your property behind.' Presently Nestor himself recognises that Athena has been with the youth and points the moral. We suspect that the wise old man had some inkling of her presence before.

At Pylos, then, the theme is this: 'Be brave, relying on the gods and on yourself, as the son of Odysseus.' At Sparta it becomes: 'Act, do not sit complaining.' Nothing is done by weeping. As before, a light touch at the outset introduces the theme. When Menelaus has explained how little satisfaction he derives from wealth, and the whole company has been reduced to tears, each remembering his own grief, Penelope delightfully comes to the rescue by observing that 'he does not like weeping after supper' (iv. 193). The situation is saved. Helen produces her Egyptian drug and troubles are forgotten.

That incident has a sequel. Menelaus, who is less didactic than Nestor, does not deliberately use Orestes as a spur to his guest. Nevertheless, lines 542-9 must have a stimulating effect upon Telemachus; and that is why the

poet wrote them. Menelaus has been telling how he rolled on the ground, weeping for his brother's death. But when he had finished weeping, the old man of the sea addressed him thus: 'Do not keep weeping, but try as quickly as you can to get to your native land. For either you will find Aegisthus alive, or else Orestes will have anticipated you and killed him.' That comes just before the news that Odysseus is alive and in Calypso's island. Menelaus, full of his own story, does not notice the impression he is making. But when he has finished Telemachus says, 'Son of Atræus, I pray you do not keep me here long....'

He actually stayed a month, because the poet wanted time to bring Odysseus home and tell us of his adventures. These do not here concern us; but we may notice that their later incidents are adapted to bring more vividly before our minds the thought of Penelope, Telemachus and the suitors. The ghost of Odysseus' mother gives him an account of Ithacan affairs as they had been when that lady died. No trouble had as yet occurred. But Agamemnon's ghost suggests the possibility of trouble. However excellent his wife may be, Odysseus will be well advised to keep some secrets from her. And, of course, the mention of Orestes makes us think again of Telemachus. Telemachus is happy (*δαίσιος*) because his father will return. Then comes Achilles, who is greeted as *μακάρων*, because he was so greatly honoured on earth and is so powerful among the dead. We know his answer. He would rather be a poor man's serf, and alive, than king among the dead. Yes, but there is one thing that still matters even to the dead. 'Come, tell me of that son of mine....' the purpose and the relevance of these exchanges should be obvious. So, if I am not mistaken, the episode of Hyperion's cattle and the folly of Odysseus' comrades is a pale anticipation of the folly and the ruin of the suitors. If it is suggested that the same 'late hand' inserted here the portentous incident of the bellowing roast flesh and in Book XX, the ghastly prelude to the massacre, when the suitors laughed and were eating bloody meat, there is good dramatic reason for the similarity. In the introduction to the *Odyssey* we heard first of Odysseus, then of his foolish men, then of his wife and home, and last—through Orestes and Aegisthus—we were made to think of his son and of his vengeance on the suitors. So now, as we approach the moment of his homecoming and vengeance, we are reminded of Penelope; then—with a touch of Orestes—of Telemachus, and finally throughout Book XII, the theme of the wisdom of Odysseus and the contrasted folly of his companions, serves as introduction to the contest of Odysseus and the suitors. That is the artistic explanation of the arrangement, whatever be the order of composition.²

² It should be noted that the similarity between st. 403, Odysseus' reply to Agamemnon's eager question 'Is my son alive?', and iv. 836, the answer of the ghostly Iphigenia to Penelope's question 'Is Odysseus living?' is deliberate. This is how the poet manipu-

lates and links his threads. In the earlier passage he is preparing us for the shift of interest from Telemachus to Odysseus; in the later, for the shift from Odysseus alone to Odysseus and Telemachus together.

Arrived in Ithaca, Odysseus, by his first prayer to the Nymphs (xiii. 360) shows that his son is in his thoughts. His first reflection on hearing of the suitors is that he stands in danger of Agamemnon's fate unless Athene helps him to devise a plan. He is indignant with the goddess for allowing his Telemachus, whom he conceives as a mere child, to go abroad; and Eumaeus brings the thought of Telemachus still nearer when he tells him of the son who bade fair to be no wit inferior to his father.⁸ It is high time, we feel, for Telemachus himself to arrive.

Accordingly, Athene appears to him in Sparta, as he lies awake at night, still thinking of Odysseus, and suggests that he had better be going home. His mother may have decided to marry in his absence, and—'you know what women are'—she would then look after her husband's interests, not her son's. A most unwarrantable reflection on Penelope. But, in the *Odyssey*, to say that Athene suggests some good or evil thing to a mortal's mind, is simply a periphrasis for the assertion that the mortal has got hold of some idea.⁹ Telemachus, in his night thoughts, conceives the notion that his mother might consult her own convenience and get married. He does not really know his mother. In Book XVI he tells Eumaeus she is hesitating, half inclined to marry. It is not true, but he has begun to believe what at first was a vague anxiety. Anyhow, in Book XV, he conceives this notion, shows the more energetic side of his character by kicking Peisistratus awake, starts home, and is duly landed by the poet in the house of Eumaeus.

Our study of his earlier education may help us to appreciate his interview with the disguised Odysseus. Like his earlier preceptors, Odysseus asks if this young man—such a man as you—is voluntarily submitting to the suitors; and he adds, in words exactly corresponding to the picture of Odysseus as presented by those preceptors: 'I myself would rather die than submit, even if I were overwhelmed by numbers.' Telemachus responds with the old plea that he is helpless, one against so many. But he ends with a sudden shift which reminds us of his first conversation with Athene. The goddess, we remember, said, 'If Odysseus came back. . . Still, that rests on the knees of the gods. To you my order is to think of a way. . .'. So now Telemachus dismisses his depression with the words, 'All this lies on the knees of the gods, but do you, Eumaeus, go quickly and tell Penelope. . .'. (xvi. 129). He means the swineherd not only to tell his mother of his arrival, but also to spy out the land. That is why Eumaeus says, 'I understand' (137). Telemachus is beginning to act for himself.

At this stage Athene bids the father reveal himself, and takes away his

⁸ *iv.* 172-7. This description is the more moving because the swineherd uses a phrase which recalls exquisite memories of Nausicaa (*v.* 163). The charm of this reminiscence will not be felt unless we observe that it does not stand alone. The comely of the cloak, for instance, recalls the interview with Aote. Cf. *vii.* 230, 265, 290, and *xiv.* 154,

400, *xvii.* 530.

⁹ Thus Menelaus, with his own peculiar courtesy, suggests that Athene put it in Helen's mind to withdraw from the wooden horse and that 'some daimon' suggested she should go and call the hidden warriors by by name, *xiv.* 271-280.

disguise. Telemachus believes he is a god. Read his speech and his father's answer. You will feel that there is something familiar, although the charm is new. Well, when Telemachus whispered to Peisistratus that the palace of Menelaus must be like the palace of Olympian Zeus, Menelaus answered, with the same touch of human modesty, that he was only a poor mortal man (iv. 74 ff., xvi. 200 ff.). These things are not accidental. In a moment you will hear how the father and the son would have wept till night had not Telemachus relieved the tension by the familiar jest, 'What ship brought you here? I do not think you came on foot.' So, in the court of Menelaus, everyone was weeping when Peisistratus came to the rescue.

Again, Telemachus admits his father's fame for fighting and for cunning, but cannot believe that 'two men' could beat such strong antagonists as the suitors. His speech recalls the speech of little faith which Nestor had to rebuke. And, sure enough, the father's answer is the question, 'What do you think of Zeus and Athene as allies?' Odysseus gives his son instructions for the coming struggle, and ends with a fine appeal to his young pride. The women and servants are to be tested. 'We will try them, to see which of them honours us two, and which sets us at naught, and slights you, *ταῖσιν ἑστιά.*' That fetches from Telemachus a good response. He is trying now to emulate his father, but he does not think he can emulate him in action. It seems to his immaturity so much easier to show that he too can think ingeniously. So he tells his father he will show his courage later; for the moment he will offer an intelligent criticism. He does not think the testing scheme expedient. Of course he puts his bright suggestion in the formula, *αἰ εἰ φράζεσθαι ἀνδρά.* We are not told that Odysseus made any answer. Indeed the incident is invented simply because it marks a stage in the evolution of Telemachus. When we have reached the palace, and Eumaeus is about to leave the son and father to their own resources, Telemachus says, xvii. 604 —

ἔμοι τὰδε πάντα καὶ ἀθανάτοισι μέλῃσιν.

That is the combination he has all along been learning to appreciate.

We cannot linger on the details of the 'testing' and the warning of the suitors, artistically parallel, as we have said, to the warnings given to Aegisthus, and again to the companions of Odysseus. Just before the testing of Antinous, Telemachus uses phrases which recall, with the appropriate differences, his first efforts in Book I (xvii. 396 ff., i. 189 ff.). Again, when Amphimedon, who is so much nearer salvation than Antinous, yet fails to save himself, receives the more impressive warning which his character deserves, the poet uses the occasion for a noble statement from Odysseus of the central notion of the poem (xviii. 130 ff.). But for the present, though the larger scheme should not be forgotten, we must concentrate upon Telemachus.

Penelope, reminded by Euryname that Telemachus is 'of age' (xviii. 175), rebukes him for allowing the suitors to insult his guests. His answer marks a further stage in his growth. He has to keep his father's secret, and

yet he has to admit that his conduct seems unmanly. Compare his words with his answer to Antinous in II. 314. He now claims *θυμῷ νόεω καὶ αἰδῷ ἐκαστα* . . . But he is not, he says, a free agent : *οὐ δύνανται* . . . Yet he is stronger now than he was then (406-411). Eurycleia is pleased to notice that Telemachus is taking charge of the household (xix. 22), and Penelope notices it too (161). She does him an injustice at 530, but it is of the same order as his own injustice to her. Finally, just before the crisis, Odysseus himself, for a moment, almost loses faith. His heart is firm, but anger and anxiety will not allow him to lie still (xx. 23). Athena comforts him, and is now able to say, 'You have your home, your wife, and a son who is the sort of son one wishes to have' (35). Odysseus answers, just like Telemachus, that he is alone against so many enemies : and like Telemachus, he ends, *τὰ σὲ φράζεσθαι ἄνωγα*. It is a fine conception that the hero himself at the supreme moment, should need to be reminded of the combination, self-reliance and reliance on the gods, which has formed the chief part of his son's education.

But Odysseus begins the fateful day in a happy mood. He has overheard the maidservant's lucky words, and is cheerful. Telemachus too begins well. He rises, godlike, *ἰσόθεος φρον*, dresses himself, and asks how the guest has been treated by his mother, whom characteristically, he describes as, in spite of her discretion, somewhat capricious (132 ff.). He is obviously in high spirits, and is bolder than ever before with the suitors. It is lucky, he says, for Otesippus that he missed Odysseus with his ox-foot. Had he hit Telemachus would have killed him on the spot (306). Then caution, and the thought of his father's instructions make him repeat that, after all, he must put up with it: he is one against so many. It is our old theme; but it is combined with a fine new touch of character. When Telemachus first met his father, Odysseus delighted us with a new version of a speech by Menelaus. 'I would rather be killed,' said Odysseus, 'than put up with it.' It is now the turn of Telemachus to tell the suitors, 'kill me, if you will. It would be better to die than always to put up with this' (315 ff.).

In the episode of the bow, Telemachus is extraordinarily happy (xxi. 102), and has developed unexpected physical strength (128). When Penelope intervenes, he asserts his manhood and rebukes her. She is on weak ground when she offers to interfere in the disposal of the bow. In the absence of Odysseus that is plainly the business of Telemachus. So his *τόξον δ' ἀνδρείοισι μέλῃσι* rings more true than did the *μῖθον δ' ἀνδρείοισι μέλῃσι* of Book I. The earlier and weaker passage is appropriate to the first halting attempts of the youth to act the man's part: the stronger passage comes at the moment when Telemachus for the first time is feeling really like a man.

But the poet is too good an artist to allow Telemachus to become simply a copy of his father. His charm lies in his imperfect approximation. Odysseus kills his victims in fine fashion. Telemachus also kills his man, but the episode is far less glorious (xxii. 91). Still he kills his man and shows his courage. But the cunning which he thought he would find so easy, when he talked in the cabin of Eumaeus, at the present exciting moment, he is forced to admit, has failed him. When the suitors suddenly

get weapons, and Odysseus puts the blame on 'one of the women or Melanthius.' Telemachus is fain to confess, 'It was I, and no one else, made the mistake. I left the door ajar.' When it comes to the pinch, it seems, his father's cunning is not so easily imitable.

A finer example, but an example of the same method, occurs after the suitors have been killed. Penelope comes down and, though she really knows him, does not speak to her husband. Telemachus, as usual, fails to understand. He is all impatience. He insists that Odysseus is Odysseus. He calls his mother 'stony-hearted' to sit so silent. Her quiet answer is memorable, and is more moving because of the two earlier occasions when she has modestly 'stored in her heart' her son's words. On this occasion she does nothing of the kind. She is so busy thinking of Odysseus. 'We have our signs,' she says, 'by which we shall know.' And Odysseus smiled and told his son to let his mother alone (xxiii. 105 ff. 112-3). The snub is so affectionate that it is hardly felt, and its effect is lightened by the generosity with which lines 117-122 put Telemachus in the place of an adviser. But Telemachus has felt it. He has learnt modesty, not so much from his father's gentle snub as from the facts of the situation. He realises that his parents understand each other better than he understands them. That is why his answer this time is: 'Do you look to it yourself, dear father: for they say your wit is the best wit in the world, and no mortal man could vie with you: and we will follow you right eagerly obedient, and I promise that for bravery you shall not find me lacking so far as my powers go.'

Telemachus is now of age and justifies his epithet *τετρωμένος*. He has, in fact, attained the sense of the 'due measure' which is requisite in a Greek hero. He does not pit his intelligence against the man of many devices, but he does not fall into the opposite mistake of confusing the object of his admiration with a god. He cannot claim to equal the courage and the strength of the great-hearted, much-enduring Odysseus. But he will not lack valour within the limits of his powers.¹²

¹² The problem of Book XXIV. is too complicated for discussion here. But what has been said above has relevance to the discussion of the use of the word *εὐχρη* in 36 and 192, which has been unnecessarily explained as Orphic. Remember how Zeus criticised

complaining mortals, how Menelaos discovered that wealth is not happiness, and how Odysseus' fortune is contrasted with the fates of Agamemnon and Achilles. The epilogue has a closer connection with the prologue than is often supposed.

J. T. SHEPPARD

THE VENETIANS AND THE VENETIAN QUARTER IN CONSTANTINOPLE TO THE CLOSE OF THE TWELFTH CENTURY.

THE foundation and development of the Venetian Quarter in Constantinople, and the history of the early trading relations between Venice and the Roman Empire are intimately connected with and illustrate the movement by which the Republic gradually passed from actual, through merely nominal, vassalage to actual and formal independence. That movement constitutes an essential part of early Venetian history, the growth of the Republic as a free State between the Empire of the East and the Empire of the West, both weak at sea and in need of a fleet which Venice alone was able to supply, and shows us the Republic skilfully steering her course between Saracens, Normans, Greeks and Germans towards her goal, naval supremacy in the Adriatic and the Levant.

It is not the object of this paper to dwell on the larger movement, but rather to examine the relations between Venice and the Eastern Empire with special reference to the Venetian Quarter in Constantinople. These relations were governed by the Chrysobulls, or Golden Bulls, whereby the Emperors made gradually extending concessions to the seamen and merchants of their vassal State. Just as Venetian relations with the Western Empire are to be traced in the series of *Pacta* and *Præcepta*, so the growth of Venetian trade and the importance of the Venetian fleet may be studied in the series of Chrysobulls. The earliest of these which has come down to us, though only in a highly corrupt Latin translation, is the Golden Bull of the Emperors Basil and Constantine (A.D. 992).¹ The Doge of Venice was Petrus II Orseolo, who sent an Embassy² to Constantinople and secured a Chrysobull, conferring on the Venetians '*libertates et immunitates favorabiles concessas Venetis navigantibus seu mercimoniis conferentibus in omni Civitate et loco sub Imperio subjectis*.' The main

¹ *Fontes Rerum Austriacarum. Diplomata, acta et Acta*, xiii, xiii. Tafel and Thomas, *Urkunden zur älteren Handels- und Staatsgeschichte der Republik Venedig*, Wien, 1850, xi, 36, no. xvii. I shall refer to this collection as T and T. The original document is in the Bibl. Marciana, Cl. v., Cod. 10521; see Romanin,

Storia documentata di Venezia, i, 361. T. and T. and Romanin give the date as 991, but Kretschmayr, *Geschichte von Venedig*, Götting, 1903, p. 129, gives March 992; this correct. The deed was executed in some secret judicial quire, that is 992.

² Muratori, *R.R.I.S.*, lii, p. 253, Dandolo.

provisions of this Bull, in which 'the Doge and his people' are represented as petitioners for the Imperial favour, were as follows:

(1) No Venetian merchant trading in his own ship, either from Venice or from other provinces, shall pay, at the custom-house of Abydos, more than two *solidi* on entering and fifteen on clearing; provided always that his cargo is of *bona fide* Venetian goods, and that he is not carrying the goods of Jews, Amalfitani, Lombards and others, shipped at Bari, to the defrauding of the Imperial Customs.

(2) No Venetian master is to be detained longer than three days after he has given notice that he is ready to sail.

(3) Venetians trading in the Empire shall be under the jurisdiction of the Logothete *de domo*¹ only, as was the ancient custom ('*secundum quod ab antiquo fuit consuetudo*'). The magistrates from whose authority the Venetians are exempt are specified.

(4) The Venetians are bound to furnish transport should the Emperor desire to send a force to southern Italy ('*operare cum suis navigiis pro liberatione de nostro hoste, qui forsitan vult nostrum Imperium in Longobardiam² dirigere*').

A consideration of the document shows, in the first place, that it is a *praeceptum* not a *pactum*; it is unilateral; the Emperor alone speaks, the Venetians are not a party; there is no contract; they receive favours and duties are enjoined on them as subjects. And this quality of a precept characterizes all the Bulls down to the Bull of Isaac Angelos (1187), when the form of a pact, or convention, is adopted and the Venetians appear as a contracting party.³ In the second place, though no earlier Bulls have come down to us, and may possibly never have existed, it is clear that the Bull of 1092 is not the earliest statement of Venetian privileges and duties. The Bull is granted '*pro promissione quae antiquitus fecerunt*,' on the ground of ancient promises. The obligation to furnish transport is referred to as '*secundum antiquas consuetudines*'; the sole jurisdiction of the Logothete is described as '*quod ab antiquo fuit consuetudo*.' It is impossible to say how ancient were these *consuetudines*; possibly they never existed in other than verbal form, but we may conjecture that they dated back to the reign of the Emperor Basil I. and to the Dogeship of Ursus Particiacus, roughly speaking about the year 880,⁴ when the Emperor sent an embassy to Venice to secure the support of the Venetian fleet.

As regards the first clause establishing the duty of seventeen *solidi*, in all, on every Venetian ship that entered and left Constantinople, Kretschmayr⁵ is of opinion that this was a *restitutio in integrum*. The Bull states that Venetian merchants testified to the fact that they had been charged

¹ That is the *Logothete de domo*, or ref. Basil. T. and T. xii. 38, n. 3.

² Thema Longobardia = Lower Italy.

³ See C. Neumann, 'Zur Geschichte der Byzantinisch-Venetianischen Beziehungen,' *Byzantinische Zeitschrift*, no. 1, 1892, p. 268.

⁴ Edmund Lant, 'Der allmähliche Übergang Venedigs von faktischer zu nomineller Abhängigkeit von Byzanz,' in *Byzantinische Zeitschrift*, no. 3, 1894.

⁵ *Op. cit.* pp. 128, 129.

thirty *solidi* and upwards instead of the seventeen *solidi* which was the established charge. The Bull merely reaffirms the original due. The difference between the charge of two *solidi* for ships entering and fifteen for ships clearing the port is to be explained by the nature of the goods they imported—goods of low value, such as wood, wool, salted fish—and the nature of the goods they exported—silks, furs, aromatics, drugs, leather, sugar, arms, etc.,² cargoes of high value. The result of this fixed tax on the ship, whatever its size, instead of on the value of the cargo led the Venetians to increase the capacity of their ships and, no doubt, had considerable influence on the steady development of the Venetian fleet. As regards that point the Bull affords proof that the Venetian fleet was already essential to the Empire. The Venetians were bound to supply shipping to transport the Imperial army to Italy should occasion arise. Finally we must notice that in this earliest Chrysoball there is no mention of a Venetian Quarter in Constantinople; we do not hear of a Venetian Quarter in the Imperial City for another ninety years.

During the ninety years that separate the Bull of Basil and Constantine from the Bull of Alexis I. (1082), the State of Venice developed rapidly under the impulse of its great Doge, Petrus II. Orseolo, and the policy he bequeathed to it. Striking evidence of growing maritime power is afforded by the appeal which Dalmatia made for protection against the Selaves. The maritime weakness of the Empire is proved by the fact that the Emperors Basil and Constantine entrusted the Venetians with the task they themselves were powerless to perform. The *triumphale vexillum*³ of Doge Petrus II. Orseolo was borne down the Dalmatian coast and won for the Doge the title of *Dalmatias Dux*, recognised by the Eastern Emperors and also by the Western Emperor Henry II. (1002). The relief of Bari by Venetian aid (1003) led to an Imperial marriage for the Doge's son Johannes, who espoused the Emperor's niece, Maria Argyropoulos. The advent of the Normans and their menace to the Eastern Empire still further demonstrates the position of Venice as a naval power of the first order. Robert Guiscard threatened to seize Durazzo, commanding the Via Egnatia, the approach to the east. Alexis I. appealed to Venice for aid. The Republic, in the interests of her growing commerce, could not see with indifference the Normans spanning the Adriatic at its mouth. In 1081 the Venetian fleet of sixty sail arrived at Durazzo, defeated the Normans, and relieved the town, though it was treacherously handed over to the invaders in February 1082. The Emperor's needs as much as his gratitude explain the ample nature of the concessions made to the Venetians by his Chrysoball of 1082. The Golden Bull of Alexis I.⁴ (May, 1082) is the basis of all subsequent Bulls down to the Bull of Isaac Angelos (1187). It is the first to give a reason

² *Gliozzi, Storia di Venezia*, tr. Pinotti, Venetia, 1879, p. 233.

³ *M.M.G.H.*, ix. 31.

⁴ Neither the Greek original nor the

official Latin translation is known; but the Bull is recited in the Bull of Manuel (1148), T. and T., xii. 49.

for the concessions, namely, Venetian aid against the Normans at Epidaurus, '*quod Dyrrachium vocamus nos*', that aid is represented as being granted spontaneously, '*et maxime quando spontanea . . . in his preliis . . . hi vincerint*'. It is true that the Emperor styles the Venetians '*recti et veri duli*' of the Empire, but the virtual independence of Venice is suggested by the words of Anna Comnene ('*ἀλλὰ καὶ τοῖς Βενετικοῖς προσκαλεῖται δὲ ὑποσχέσθαι καὶ δοῦναι*').¹¹ The chief provisions of the Alexian Chrysobull are as follows:—

(1) A grant of twenty pounds (of perperi?) annually to be distributed among Venetian Churches as the Republic shall think fit.

(2) The Doge and his successors to enjoy the title of Protosebastos with an ample revenue ('*cum roga etiam sua amplissima*').¹²

(3) The Patriarch of Grado and his successors to enjoy the title of Hypertimon with a revenue of twenty pounds.

(4) The Church of S. Marco in Venice to receive from each Annalistano trading in Constantinople and the Empire three perperi ('*annalistata tria*') yearly.¹³

(5) The concession to the Venetians of a Quarter in Constantinople, with shops (*orysteria*), in the district (*embolo*) of the Ferry (*Peramatis*), between the gates called the Jew's Gate (*Ebraico*) and the gate called the Watch Gate (*Vigla*), with all occupied and unoccupied lands and comprising the three wharfs or landing stages on the shore of the Golden Horn (*maritimus III. scalas*) which lie within the said Quarter: also the Church of S. Akyndini with its bakery (*manikipion*) and its revenue of twenty Bezants.

(6) The concession to the Venetians of the Church of S. Andrea, in Durazzo, with its revenue from the fisc.

(7) The Venetians acquire the right to trade, free of any charge whatever, in all parts of the Roman Empire; then follows a list of specified cities ending with '*et simpliciter in omnes partes sub potestate nostre per mansuetudinis*,' a list of specified dues from which Venetians shall be exempt, and a list of Government officials from whose jurisdiction Venetians shall be free.

(8) The Venetians are under obligation to defend the Empire (*et toto animo . . . pugnare pro Romanorum Statu*).

(9) The sanction for infringement of Venetian privileges is a fine of ten pounds of gold and four times the value of the goods unappropriated; the penalty to be exacted by the Logothete de donno.

On the general effect of the Alexian Chrysobull we note first the vast extent and importance of the trading rights conferred upon the Venetians. Anna Comnene was fully justified when she laid stress on these concessions,

¹¹ S.S.H.B., Bonn, 1839, Anna Comnene, *Alexiad.* Lib. IV. 2, Lib. VI. 5. 'ἀλλὰ καὶ τοῖς Βενετικοῖς τὰ ᾧπαύτως ἡθέλησε . . . καὶ τὰς ἐκείναις ἀλλοτρίωντος ἀξιώσεως ὑποσχέσθαι.'

¹² S.S.H.B., op. cit. Lib. VI. 3. 'πρὸς τὴν ἀναλίδου δόξαν.'

¹³ S.S.H.B., op. cit. Lib. VI. 3. 'τῶν ἀντιπρὸς τοῖς ἀρχιερεῦσι βασιλεῦσι καὶ ἐκκλησίαις ἀποδοῦναι ἐκαστῶν τούτων τὰς δὲ Μάρκος τοῦ Ἀντιστομῆτος ἀρχιερεὺς ἀντίστοιχον τι εἶδος.'

‘τὸ δὲ ἐξ μείζον, τὴν ἐμπορίαν αὐτῶν ἀξιμῶν ἐποίησεν ἐν πάσαις ταῖς ἐπὶ τῇ ἐξουσίᾳ Ῥωμαίων χώραις.’¹⁴ These privileges gave Venice an overwhelming superiority among the Italians trading in Constantinople; competition with her became futile and thus laid the roots of that bitter jealousy which Genoa, and probably Pisa and Amalfi, subsequently displayed. The humiliation of Amalfi was complete as her subjects became, by this instrument, tributaries of S. Marco. As regards jurisdiction the Alexian Chrysobull confirms the exemptions conferred by the Bull of Basil and Constantine, though we can hardly go so far as to hold with Gfrörer¹⁵ that the jurisdiction of the Logothete disappears merely because he is not mentioned. It is probable, however, that with the creation of a Venetian Quarter the jurisdiction over Venetian traders in Constantinople tended to pass into the hands of the Doge and his representatives in the Imperial City. Finally, for the first time we have notice of a Venetian Quarter in Constantinople and a brief definition of its boundaries. It will be more convenient to defer the topographical examination of the Quarter till we come to the Chrysobull of Manuel (1148), in which the Alexian Chrysobull is recited, because the definition of the Quarter is more complete in the later Bull and because various documents, dating between 1082 and 1148, throw light on the topography of the Quarter and, in a measure, on the way it was administered. But, in passing, it seems desirable to point out that Gfrörer’s contention¹⁶ that the Quarter was granted to the Patriarch of Grado and the clergy of Venice, not to the Doge and the State of Venice, is hardly tenable. In the passage which seems to have misled the historian, ‘*ad hoc*’ can hardly, even in the barbarous Latin of these documents, be taken to mean ‘*ad sanctissimam ecclesiam sancti apostoli et Evangeliste Marci*’; ‘*via*’ wherever it occurs in the document, refers to the Venetians; and conclusive against Gfrörer’s view is the fact that in 1090¹⁷ we find the Doge making concessions of various properties in Constantinople which, he declares, came into the possession of the Republic in virtue of the Alexian Chrysobull. The Venetians, having thus acquired a predominant position among the traders in the Empire, proceeded to build up a similar position in the Latin Kingdom of Jerusalem, based upon privileges granted by Boemund I. of Antioch (1098) Baldwin of Jerusalem (1104), Tancred of Antioch (1112).¹⁸ This policy was viewed with disfavour at Constantinople, always jealous of the Latin intrusion, and produced the first serious rift between the Venetians and the Empire. The second cause of disagreement, the relations between Venice and the Normans, had not yet matured. Venice was still pursuing her old policy of hostility to the Normans owing to the dread of seeing herself shut into the Adriatic by the Norman power at its mouth. She had not yet begun to negotiate with the Normans for trading rights in Apulia, and when in 1108 Alexius I. sought Venetian aid

¹⁴ S.S.H.R., *op. cit.* lib. vi. 5.

¹⁵ Gfrörer, *op. cit.* p. 303.

¹⁶ Gfrörer, *op. cit.* pp. 309, 300.

¹⁷ T. and T., iii. 55.

¹⁸ T. and T., iii. nos. xxvii, xxx, xxi.

against a threatened attack (*requirit ut de opportuno subsidio sibi placeat* (the Doge) *subvenire*)¹⁹ the Doge agreed. The episode is important; it is related by Andreas Dandolo only and seems to indicate the complete independence of Venice, but it is necessary to be on guard against the '*Veneta vanitas*' of the Ducal chronicler. The result of Venetian support was that Alexius was able to conclude a favourable peace with the Normans. The Venetian attitude in Palestine, the steady progress of the Republic towards commercial supremacy in the Levant, the establishment of Theophilus Zeno as first Venetian Consul in Syria (1117),²⁰ confirmed the Emperor, Johannes Comnenus, in his dislike and suspicion of Venice; and when the Doge, Domenico Michiel, sent an Embassy (1119) to beg for the renewal of the Alexian Chrysobull, it was refused. (*Ille* (the Emperor) *omissis paternis vestigiis id facere renuit*.)²¹ Meanwhile the Venetians acquired the third part of Tyre and dominant commercial rights therein,²² as well as in other cities of the Kingdom of Jerusalem.²³ In 1122 the Doge took the sea with a powerful fleet, besieged Corfu, which held for the Emperor, but was called away to help the Christians of Palestine against the Saracens. He was victorious, and on leaving Syria he attacked Rhodes. Here then we find Venice in open rupture with the Eastern Empire, the vassal attacking his superior. The upshot proved the weakness of the Emperor. Without a fleet and constantly menaced by the Norman power he could not do without Venetian help and was driven to renew and enlarge the Alexian Chrysobull.

The Johannine Chrysobull (August 1126),²⁴ or rather renewal of the Alexian Bull of 1082, begins by condoning recent Venetian offences, recalling their ancient loyalty to the Emperor Alexius I, and ignoring '*que paulo ante ab eis mala gesta sunt*'. It goes on to confer the present Chrysobull on the condition that the Venetians promise '*toto animo pro Romania populo*'. The Chrysobull reaffirms the Chrysobull of Alexius in all its details '*sicut expositum est a principio, quando eis donatum est*'. The honours and emoluments of Doge and Patriarch are confirmed, also the donation of the Quarter and of the trading rights. The people of Anafi still continue to be tributaries of S. Marco. It seems that both Venetian population and business had been growing in Constantinople, as was natural under the fostering influence of the Alexian concessions, for in 1148 we find them petitioning the Emperor Manuel that their Quarter should be enlarged. The result was the Chrysobull of 1148, which is chiefly concerned with the definition of the Venetian Quarter.

The Chrysobull²⁵ opens with a handsome recognition of Venetian services against '*eum, qui potestatem habet Sicilie*', that is, Roger, who finding parts of the Empire unprotected (*vacuolitas fore partes Imperii*

¹⁹ *RR. II. 88*, iii. p. 261.

²⁰ *T. and T.*, xii. 17.

²¹ *RR. II. 88*, xii. 209.

²² *T. and T.*, xii. no. 21.

²³ *T. and T.*, xii. no. 21.

²⁴ *T. and T.*, xii. 96.

²⁵ *T. and T.*, xii. 109.

nostri') attacked them. The Venetians, invited to oppose him ('*coacti in congressum contra eum*'), and considering this attack as their own personal injury ('*hoc tanquam proprium dampnum*'), placed themselves at the disposal of the Empire. In return for these services and as the Venetians are now petitioning for an enlargement of their Quarter, declaring that they are cramped as they now stand ('*adangeri sibi et mansiones et embolum*



et scalas, in quibus naves eorum in portu stant, vertificantes, se non modicam angustari, et quod non possint hiis solis, que ipsis data sunt a beati memorie Imperatore et non Imperii nostri in hac civitate Imperatrice contenti esse'), the present Chrysobull is granted them and in it is defined the new enlarged Quarter, including the original concession in the Alexian Bull, from the Porta Ebraica to Vigla.

The Chrysobull of the Emperor Manuel gives us no very clear idea of the Venetian Quarter in Constantinople. The whole topographical question

is extremely obscure, and students from Gfrörer to Mürdmann have admitted the difficulty and the conjectural nature of any attempt to reconstruct the boundaries of the Quarter. However, availing ourselves of other documents, let us see what light can be thrown on the subject. It is hopeless to expect to identify all the places, monasteries and churches mentioned in the Chrysobull; yet with the help of the accompanying plan—which I admit is itself highly conjectural—we may, perhaps, recover some general idea of the locality. But first it is well to explain one or two technical terms which occur in the Chrysobulls and other documents. The Alexian Chrysobull (1086), in which we find the first mention of a Venetian Quarter, states that it was situated '*in Embolo Peramatis*'. An *Embolum*, it seems, was a place where merchants stored and sold their goods and generally transacted business. Each of the Italian maritime States Venice, Genoa,²⁰ Pisa,²¹ and Amalfi, had an *Embolum* in Constantinople. It was a building with an open loggia running round it and was of the nature of an Exchange-house²² rather than of a bazaar. But the word *Embolum* soon acquired a secondary and wider meaning and came to be applied to the whole quarter; '*in Embolo Peramatis*' means in the quarter or district of the Ferry. We find the word *Embolani*²³ signifying the Pisans dwelling in the Pisan Quarter. *Ergasteria cum solaris suis* means shops with a store behind them on the ground floor, and upstairs the *solaria*, large rooms, usually serving as dormitories. *Scala* means a wharf and landing stage. *Tridinium*²⁴ means a three-storied house.

Broadly speaking the Venetian Quarter occupied an oblong strip of land running north-west and south-east along the southern shore of the Golden Horn, between the slopes of the third hill (now crowned by the Mosque of Suleiman and the Seraskerat) and the sea. It covered more than half the distance between the present outer and inner bridges, and lay to the east of the Quarter known as the Phanar. To the East of the Venetian Quarter came first the Amalfitani, then the Pisans, and finally the Genoese,²⁵ all three eastward of the outer bridge. The length of the Venetian Quarter is given²⁶ as 385 paces, or about a third of a mile; its width, between the slope of the hill and the shore, has not been determined, as the line of its southern boundary is uncertain, but roughly speaking it may be calculated at 100 paces or 170 yards. Down the middle of this oblong strip ran the maritime wall of the city, leaving, according to Dr. Paupati, about 80 yards

²⁰ De Simoni, 'Sui Quartieri del Genovesi a Costantinopoli nel secolo XII,' in the *Giornale Ligustico*, anno 1874. The Genoese *embolum* at Coparis was founded by the Emperor Manuel in 1170.

²¹ Mikulovich and Müller, *Acta et Diplomata Graeca res Graecas antiquae illustrantia*, vol. III. Renewal of conventions to Genoa and Pisa, a.d. 1188, 1191.

²² Rozzaco, *Enc. del linguaggio Italiano*

Storia di Amministrazione, gives *Embolo* as equivalent to *Pandion* or Exchange-house.

²³ S.S.H.B., De Ungo, Notes to the Atlas, vol. II, p. 539.

²⁴ '*Comprehendens triidinarium ultra domitium Mili*,' T. and T., III, III.

²⁵ The Genoese quarter was moved to Galata later on.

²⁶ Paupati, as quoted by De Simoni, *op. cit.* p. 141, n. 1.

between the walls and the sea, and perhaps as much on the inner side, between the walls and the rise of the hill.

In attempting to identify the boundaries of the Quarter, as given in the documents let us begin with Vigla: '*incipit ab ipsa Vigla*,' says the Chrysobull of 1148. The site of Vigla (Βίγλας), or the *tractus Viglentie*, the headquarters of the City-guard (*Vigili seu Execubii*)²¹ and their Chief Constable, the *Drungarius Viglar*, has been placed by Dr. Paspatis, Prof. A. van Millingen, and Dr. Montmann on the heights of the third hill, at the western end of the Mosque of Suleiman. In the city wall, below the heights of Vigla, we know that there was a Porta Viglar which we have good reason for identifying with the existing Odun Kapussi or Wood-merchants' Gate.²² The tract along the shore, between Odun Kapussi and Baluk-bazar Kapussi, or Fish-market Gate, was known in the twelfth century as the Ζεύγμα, the *Parama* or Ferry. We know that the Ζεύγμα was the quarter of the wood-merchants, for during the Nika revolt under Justinian, the cry was raised, 'Who killed the wood-merchant at the Ferry?' We shall have occasion to note that the modern Turkish names are frequently merely translations of the earlier Graeco-Roman names, and we are therefore justified in identifying the Odun Kapussi, the Wood-merchants' Gate, with the Porta Viglar, which was at the western end of the wood-merchants' quarter on the Ζεύγμα. Now when the Chrysobull of 1148 says the Venetian Quarter *incipit ab ipsa Vigla*, and when Anna Comnene says that her father, Alexius I, gave to the Venetians 'τὰ ἀπὸ τῆς παλαιᾶς Ἑβραϊκῆς σκάλας μέχρι τῆς καλουμένης Βίγλας,' do they mean Vigla on the heights or the Porta Viglar? If I understand Kretschmayr's map²³ correctly he holds that the Venetian Quarter ran from Vigla on the height in a triangle whose sides ended at the Porta Viglar to the west and the Porta Ebraica to the east. The phrase '*ab ipsa Vigla*' may give colour to the contention that the Venetian Quarter began at Vigla on the height, but three considerations seem to make it clear that the Porta Viglar was the starting-point. When Anna Comnene says '*μέχρι τῆς καλουμένης Βίγλας*' she means not to the place called Vigla but '*μέχρι [τῆς σκάλας] τῆς καλουμένης Βίγλας*,' from the old wharf Ebraica to the wharf called Vigla: the wharf called Vigla could not well be on the height, but it probably was on the shore near the Porta Viglar in the city walls. Again the boundary line of the Quarter is described as returning to Vigla, whence it set out, leaving 'on the left' the watercourse that descends from Vigla on the heights; the watercourse would be on the right if the line were returning to Vigla on the height. Finally the line is described as *ascending* a little to the south from Vigla (*ascendit paululum versus meridiem ab ipsa Vigla*). It could not ascend anywhere from Vigla on the heights, but it could, and probably did, ascend from the Porta Viglar towards Vigla on

²¹ Du Cange, *Notae to the Alexiad*, at sup.

²² Montmann, *Konstantinopel: Topographische und Chronologische Beschreibung* (Lille: Desclée, de Brouwer

et Cie., 1892, p. 45, § 75.

²³ Kretschmayr, *op. cit.* Map of Constantinople.

the heights. It seems then that the *ipso Vigla* of the Chrysobull is the Porta Viglae.

Having tentatively fixed the Porta Viglae as the north-western extremity of the Venetian Quarter, let us follow the district south-eastward first along the outer, the northern or sea side of the maritime wall. That sea-front was known as the *Zadyya* or *Perama*, the ferry which crossed the Golden Horn at its narrowest point to Sykai, the modern Galata. Its whole length was traversed by a street with houses on each side. This street was called the Drungary Street (*'viam quae vocatur de Lungaria extra murum'*).³⁰ To the south, or right, coming from Porta Viglae, the houses faced the street and ran back to the city-wall; to the north, or left, coming from Porta Viglae, they faced the street and ran back down to the shore of the Golden Horn.³¹ (*Iste sunt case extra iuxta murum civitatis. Iste case sunt de ripa secus mare.*) About 100 yards from Porta Viglae we come to another gate in the City-wall, which we identify as the Drungary Gate, the Porta Drungaril. This is the gate *'quae est iuxta parvum templum Praecursoris'*,³² the Church of S. Johannes de Carnibus recorded in the terrier of the Patriarch of Grado,³³ the modern Sindan Kapussi, or Prison Gate, where, down to the year 1891, there were the remains of a small Byzantine church.³⁴ This gate gave access from the inner streets of the city, by means of a cross-road leading north out of the Drungary Street down to the wharf known as the *'Scala de Drungaria'*,³⁵ probably the first of the three wharfs mentioned in the Chrysobulls of Alexius and of Isaac (*et maritimas III. scilicet, quae in predicto spatio* (i.e. between Ebraica and Vigla) *terminantur*).³⁶ Coming further east along the street of the Drungary the line of houses and of the city-wall was unbroken to the south for about the length of 380 yards. To the north, however, a road may have led down to the second of the three wharfs above referred to. At the end of these 380 yards we come to the Porta Ebraica which Anna Comnena and the Chrysobull of Alexius I. give as the eastern extremity or starting-point of the Quarter. The Porta Ebraica is probably identical with the modern Baluk-bazar Kapussi, or Gate of the Fish-market. But here we are met by a difficulty. At this point we find four names of gates—the Porta Ebraica, the Porta Peramatis, the Porta S. Marci,³⁷ and the Porta Piscaria.³⁸ The deed of 1229, placing the Monastery of S. Giorgio Maggiore at Venice in possession of certain property in Constantinople, gives the Porta S. Marci

³⁰ T. and T., *iii.* no. cxxxviii, p. 284, A.D. 1221.

³¹ See the terrier of the Patriarch of Grado. T. and T., *iii.* no. cxxxv, A.D. 1200. I give the dates of the documents because some are earlier, some later than the Chrysobull of 1148, though all illustrate the topography of the quarter.

³² T. and T., *iii.* 111, Chrysobull of 1148.

³³ T. and T., *iii.* no. cxxxv, A.D. 1200. Mordtmann, *op. cit.* p. 46, § 78.

³⁴ Mordtmann, *loc. cit.*

³⁵ T. and T., *iii.* no. cxxxviii, A.D. 1207.

³⁶ *In scaly de Drungaria.*

³⁷ T. and T., *iii.* 32, A.D. 1082, p. 183, A.D. 1187, *'et tres scilicet quae secus mare sunt.'*

³⁸ T. and T., *iii.* no. cxxxv, A.D. 1229, *'ex uno capite versus occidentem frons (the Quarter) in porta civitatis quae dicitur S. Marci, per quam discurrit via publica.'*

³⁹ Boudhacantz, *plan of Constantinople in Later Byzantine archæology.*

as distinct from the Porta Ebraica, and places it to the east of that gate, that is to say, beyond and eastward of the extreme eastern limit of the Quarter as given by Anna Comnene and Alexios I. It will be noticed that the name of the Porta S. Marci occurs for the first time in a document of 1229, that is, twenty-five years after the sack of Constantinople by the Fourth Crusade and the development of Venetian influence in the Imperial City, and we are driven to conjecture that an addition had been made⁴⁵ to the Venetian Quarter, namely, the piece of land lying between the Porta S. Marci and the Porta Ebraica. The Porta S. Marci may therefore correspond to the modern gate at the Jeni Jâmi.

As regards Porta Ebraica, Porta Perumatis, and Porta Piscaria, are these three separate gates, or two, or one? Mordtmann conjectures that in the thirteenth century the Porta Ebraica and the Porta Perumatis were identical, and there is nothing in the documents to invalidate the supposition; we never find the two names in the same document as representing different gates. On the other hand the Porta Piscaria of Buondelmonte is merely the Latin form of Baluk-bazar Kapussi, the Fish-market Gate, which we take to be identical with the Porta Ebraica—known after the Mohamadan conquest as Tehifout Kapussi (Jews' Gate)—and thus we arrive at the conclusion that all three names indicate, in the twelfth century, one gate only—the Porta Ebraica, through which ran the road from the interior of the city to the last of the three wharfs—the great wharf, which was reserved by the Doge in his donation to Kariman, Abbot of S. George (*schola maior, quam ad nostrum usum retinimus*).⁴⁶ The Porta Ebraica probably took its name from a Jewish burying ground, which is styled the *Judea* (*qui precurrit ad portam Perame usque ad Judæam*).⁴⁷ This concludes the survey of the district outside the walls, from Porta Vignæ to Porta Ebraica.

Passing through the Porta Ebraica we enter the city and the inner district of the Venetian Quarter. This district was bounded at its eastern end, where we now are, by the public road running from the Porta Ebraica to the wall of the Sevastokrator (*uno suo capite firmat recto tramite in via que discurrit a porta Ebrayky usque ad murum qui fuit Sevastokratoris*).⁴⁸ What the wall of the Sevastokrator was we do not know, but the document of 1206 gives it as the southern boundary of the Venetian Quarter inside the walls. (*Infra murum civitatis omnes proprietates terrarum et casarum quod firmat uno suo latere per omnia in muro qui fuit Sevastokratoris, alio autem suo latere firmat in muro civitatis*).⁴⁹

⁴⁵ T. and T., xlii. no. cclxlv, p. 271. In the reign of Pietro Ziani (1205-1229) and under the Patriarchate of Theophylus Zeno.

⁴⁶ T. and T., xii. 57, A.D. 1090, also xlii. no. clixvii, A.D. 1200, 'in via maiori in ripa de primo' (i.e. Perame).

⁴⁷ T. and T., xli. 56, A.D. 1090.

⁴⁸ T. and T., xiii. no. clixv, A.D. 1206. Deed of commendation to the Patriarch of Grado.

The area enclosed was probably coextensive with the Venetian quarter within the walls (*comprehensum etiam eodem infra murum civitatis . . . omnes proprietates terrarum et casarum . . . subscripti recti communis Venetiarum* . . .) and the boundaries defined by the deed are the boundaries of the Quarter at its eastern end within the walls.

⁴⁹ T. and T., loc. cit.

This is quite clear. The property under discussion, that is, the property conceded by the Doge, Pietro Ziani, to the Patriarch of Grado, was bounded on the north by the city-wall and on the south by the wall of the Sevastokrator. Mordtmann⁴⁰ recognises in the name of the modern Quarter of Takhti Kale, 'above the fortress of the wall' a reminiscence of the wall of the Sevastokrator. This wall, giving us the southern boundary of the Quarter, ran along the slope of the hill, passing the inner side of the gate of S. Johannes de Cornibus and ended at the courtyard of S. Maria Carpiani. From there the boundary line returned to Porta Viglao by the watercourse which flowed down from Vigla on the heights. The Quarter was enlarged both eastward (as we have seen) and westward towards Blachernae, after the Latin siege and capture in 1204 ('ubi Marinus Genoa, qui in Constantinopoli Potestas erat pro nobis fecit fieri murum novum').⁴¹

This district inside the walls also had a street running its whole length, with rows of houses on each side, backed by the city-wall to the north and by the wall of the Sevastokrator to the south; the city-wall was broken by a road which led through the Gate of S. Johannes de Cornibus, or Porta Drungarii, down to the Golden Horn, and the wall of Sevastokrator was broken by several alleys, which we cannot now identify, though one was called *Allero* ('specia quaedam de terra vacua posita in vico Allero').⁴² We can conjecturally establish the position of some of the buildings belonging to the Venetian Quarter. The Embolo, in all probability, stood just within the Porta Ebraica, or Porta Peramatis, on the road leading down to the 'great wharf.' Near the gate and close to the Embolo was the Monastery of S. George; its tower was on the city-wall ('a comprehenso angulo turris Monasterii S. Georgii, qui angulus respicit versus orientem').⁴³ Near the Embolo, too, but on the other side of the street that ran the length of the Quarter ('ante Sanctum Marcum ultra Viam'),⁴⁴ there seems to have been a Church of S. Marco, which possibly accounts for the Porta S. Marci ('Petra Monacho priori S. Marci nostri Emboli de Constantinopoli').⁴⁵ Four hundred and two feet and a half from the tower of S. George stood the Church of S. Maria de Carpiani ('a comprehenso angulo turris monasterii S. Georgii . . . usque ad iuram S. Mariae de Carpiani . . . pedes quadringentos duos et dimidium').⁴⁶ S. Maria de Carpiani is identified by Du Cange⁴⁷ with the Church of the Periblepta,⁴⁸ or Mother of God, S. Mary the Admired. About the centre of the Quarter and a little way to the south of the main road, up the slope of the hill, came the Church of S. Akindyni ('inter quas proprietates' [i.e. the area conceded to the Patriarch of Grado]

⁴⁰ *Op. cit.* p. 40, § 75.

⁴¹ T. and T., xiii. no. clxix., A.D. 1207.

A concession of water-rights by the Doge.

⁴² T. and T., xiii. no. clxxv., A.D. 1220.

⁴³ T. and T., xiii. no. clxiv., A.D. 1200.

⁴⁴ T. and T., xiii. no. clxiv., A.D. 1200.

⁴⁵ T. and T., xiii. no. clxiv., A.D. 1200.

⁴⁶ T. and T., xiii. 123, A.D. 1150.

⁴⁷ T. and T., xiii. no. clxiv., A.D. 1200.

⁴⁸ Du Cange, *Constant. Christiana, Venetia*, 1729, Lib. iv. p. 57, quoted by Mordtmann.

⁴⁹ T. and T., xii. 112, A.D. 1142; 'a sinistris vero domitium monasterii Periblepti.'

"*sita est ecclesia S. Akindyni*"⁸⁰ the chief church of the Quarter,⁸¹ probably on the site of the existing Mosque of Rustem Pasha. This church is mentioned in the earliest concession of a Quarter to the Venetians, the Chrysobull of Alexius I.,⁸² where the church is said to have had a bakery attached to its side (*Munkipium, i.e. pistrinum, quod est in ipsius ecclesiae latere*).⁸³ In 1107 the Doge, Ordelaf Falier, made over to the Patriarch of Grado, in lieu of his annual revenue of 160 pounds, and the sum of another 100 pounds due to the See, "the Church of S. Akindyni with all its territory, treasures, vestments, books, havings and belongings, within and without the walls, with all its shops (*empoteria*), its bakery and oven, its weights and measures for wine and oil, along with all our shops in the city."⁸⁴ The Doge further decreed that no other weights and measures should be legal for Venetians in Constantinople, "*nisi statera et rubi et pondera et metra praedictae Ecclesiae*." The effect of this provision is made clear in the terrier of the Patriarch of Grado where a certain Pascalis Bollanus pays annually seventy-two perperi for the use of the weights and measures, by far the highest rent upon the roll.⁸⁵ The Church of S. Johannes de Cornibus we have already placed near the gate of the same name, also known as the Porta Drungarii. It would seem, too, that there was a second and smaller *Embola* (*truncus molinum et aliud embolum*)⁸⁶ close to the hospital of S. Marcianus, but where it or S. Nicolaus or the Parakymomeni were it is useless now to conjecture. We know that there was a wharf (*scala*) of S. Marcianus⁸⁷ and it is just possible that the church may have stood on the road that led down to this wharf through the Porta Drungarii, or S. Johannes de Cornibus.

It is not clear how the Venetian colony in Constantinople was governed in these early times. We know from the Chrysobulls that the Logothete alone of Imperial officials had jurisdiction over Venetian merchants. Girocer,⁸⁸ however, holds that as early as 992 Venetian judges were appointed to act as assessors to the Logothete. He bases his argument on a clause in the Chrysobull of 992 (*namper et hoc iubemus ut per solum logothetam . . . ista municipia de iure Veneticis et ipsi Venetici scrutentur, et pascantur et judicentur*)⁸⁹ and holds that this creation of independent Venetian courts is the *immunitas* to which Dandolo is referring.⁹⁰ It is doubtful, however, whether the passage means more than that Venetian shipping and the Venetians themselves shall be under the jurisdiction of the Logothete alone. However that may be it is certain that after the capture of Constantinople in 1204 the Venetian colony was placed under the government of a Podestà, with a council and courts of his own. The document confirming the fiat created after the partition of the empire contains this clause, "*igitur nos*

⁸⁰ T. and T., *tit.* III, *col.* 1141v., A.D. 1206.

⁸¹ Ducas, *op. cit.* lib. IV, p. 81. *S. *Asindyni Ecclesia Fraxorum proprio fuit.*

⁸² T. and T., *tit.* 32, A.D. 1082.

⁸³ T. and T., *tit.* 32.

⁸⁴ T. and T., *tit.* 38.

⁸⁵ T. and T., *tit.* III, *col.* 1141v., A.D. 1206.

⁸⁶ T. and T., *tit.* III, A.D. 1148.

⁸⁷ T. and T., *tit.* 112, A.D. 1148.

⁸⁸ *Op. cit.* p. 231.

⁸⁹ T. and T., *tit.* 38.

⁹⁰ *RRH* 82, *tit.* 323.

*Marinus Geno. Dei gratia Venetorum Potestas in Romania ejusdemque Imperii quarte partis et dimidie dominator una cum iudicibus et sapientibus consiliis.*¹⁰

As to the way in which the Quarter was held, there can be no doubt that the concessions contained in the Chrysobulls were made directly to the Doge and community of Venice. But we find that the Doge almost immediately divests himself of part, if not of all, of the newly-acquired area in favour of the church. For example, in 1090, only eight years after the Alexian Chrysobull, the Doge, Vitale Falier, grants *in perpetuity* to the Monastery of S. Giorgio Maggiore in Venice and to its abbot, Kariman, *pro remedio animarum nostrarum*, the land and houses inside the city of Constantinople which lie between Vigla and the Porta Peramatis (excluding the area already ceded to the Monastery of S. Nicolo) as invested in him by the Emperor Alexius.¹¹ The phrase *in perpetuum*, however, must be understood with reservations, for the State, on occasion, resumed areas that it had alienated ('*loca quedam . . . fuerint ablata eidem* (S. Giorgio Maggiore) *et redacta in nostro comuni pro ejusdem communitalis utilitate*').¹²

Again, in 1107, the Doge Ordelafo Falier concedes the Church of S. Akindyni with all its rights and privileges to the Patriarch of Grado, thus compounding for his yearly salary and for a sum due from the State to the See of Grado.¹³ Yet again, after the capture of Constantinople (1204), Marinus Geno, the Podestà, on the orders of the Doge, Petrus Ziani, concedes to the Patriarch of Grado a wide area in Constantinople, *in perpetuum*, with all its wharfs and wharf dues.¹⁴ This area comprised houses and unoccupied lands both inside and outside the wall and the Church of S. Akindyni.¹⁵ It is doubtful whether the concession to the Patriarch covered the whole Venetian Quarter in Constantinople; it certainly covered the whole of the eastern part; but for several reasons we hold that it was not coextensive with the Quarter. In the first place we find names of householders with descriptions of their holdings, which do not occur in the terrier of the Patriarch.¹⁶ That terrier gives a list of properties, both inside and outside the walls, their tenants, and the rent in *perperi*. The list contains the names of eighty tenants, among them the State of Venice itself, '*Commune Venet.*' perhaps for the land occupied by the *Embolo*. The rents vary from one to twenty *perperi*, which the State of Venice paid for its 'holding' and to twenty-one paid by Bonaventura Beccaro. Pascalis Bellanus, as we have already seen, paid as much as seventy-two *perperi* for the right to weigh and measure which belonged exclusively to the Church of S. Akindyni. We have several leases granted by the Patriarch which throw an interesting light on the

¹⁰ T. and T., xii, 559.

¹¹ T. and T., xii, 55.

¹² T. and T., xiii, no. xlviii., A.D. 1229.

¹³ T. and T., xii, 97.

¹⁴ See above.

¹⁵ T. and T., xii, no. xlvii., A.D. 1204.

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¹⁶ T. and T., xiii, no. xlviii., A.D. 1229, where the property of a certain Hieronymus Allimanus is given as one of the holdings of the subject in question. His name does not appear in the terrier of the previous year, 1204.

size of the building sites and the customs of the Quarter. For example,⁷⁶ in October, 1206, Benedictus de Salmaza rents from Johannes Bon, nephew and agent for Benedictus Falier, Patriarch of Grado, a piece of unoccupied land outside the city-wall, near 'the great wharf' on the shore at Perama, thirty feet long and twelve wide, bounded on two sides by unoccupied sites belonging to the Patriarch, on a third by the public road, and on the fourth by the property of Johannes Bon, from the first of September for twenty-nine years. The rent is fifteen golden *perperi*⁷⁷ annually, due on the first of March and the first of September. The tenant to have the right to build and to sub-let; but at the expiry of the lease the land with the buildings on it return to the Patriarch, except in case of fire or violence of the Sovereign ('*excepto periculo incendii et violentia superioris*'). Again⁷⁸ in March, 1207, Alexius and Theodorus, of Durazzo, rent from the Patriarch of Grado, for twenty-nine years, at three golden *perperi* a year, due each first of April, *excepto incendio et violentia alicujus senioris*, that plot of land bounded by the public road, the wall of S. Irene, the property of Henricus Allemanus and the archivolte of S. Irene; at the expiry of the lease the buildings become the property of the Patriarch, but in case fire or the violence of Princes shall have destroyed the buildings, the lease shall be prolonged to such a term as shall give the tenant a full twenty-nine years with the buildings intact on the land. Again⁷⁹ in August, 1207, Petrus Longo rents from the Patriarch of Grado, for twenty-nine years, at 11½ *perperi*, due in February and August, a piece of land outside the walls at the Drungary wharf 13½ ft. by 10 ft., bounded by the public road, the city-wall, S. Irene, and the property of the Patriarch. By the year 1255 it would seem that the value of land had fallen, for we find⁸⁰ that a plot of land, outside the walls, close to the Great Wharf, measuring 32 ft. by 15 ft., only fetches six *perperi* a year; and a like sum is all that is received for a similar plot leased in June of that year.

It is difficult to estimate the size of the Venetian population in Constantinople, but we know that when Manuel lured the Venetians back after the Doge had withdrawn his countrymen in 1168 or 1170, they returned to the number of about twenty thousand, and upwards of ten thousand were arrested in the city alone in 1172.⁸¹ They

⁷⁶ T. and T., xiii. no. clixvii., Oct. 1206.

⁷⁷ Fanti, *La cartura dei Veneziani in oriente*, Venice, 1900, pp. 23, 24, makes the following calculation as to the value of the *perperi*. The *libra* contained 72 *perperi* (Pagolotti, *La politica della mercatura*), each *perperi* was worth 2 *lire* Venetian (Predelli, *Il Libro Comasco*); the *libra* Venetiana in gold was worth 6.82 *lire* Italiane; if we take the relative value of money in the twelfth century as six times greater than it is now, we get the value of the *perperi* at *lire* Italiane 30.72 or roughly speaking at £1 10s.

The annual rent, therefore, of this piece of property 12 ft. by 30 ft. was £22 10s. at present British money. Diehl, *Études Byzantines*, Paris, 1905, note, says: 'L'Asperperon dont il est souvent question dans nos documents était une monnaie d'or byzantine, valant, en rapport même de nos textes, 10 deniers. Enfin le denier équivalait à 10 francs de notre monnaie.'

⁷⁸ T. and T., xiii. no. clixvii., A.D. 1207.

⁷⁹ T. and T., xiii. no. clixviii., A.D. 1207.

⁸⁰ T. and T., xiii. no. cccxxviii.

⁸¹ *M.M.O.S.*, Tom. xiv. p. 78.

cannot all have inhabited the Venetian Quarter, and indeed we find the Emperor Manuel endeavouring to compel the Venetians to reside in the Quarter he had assigned them, a proof that many were living outside it; indeed Cinnamus says so explicitly.⁸² With a view to dealing more readily with the Venetian population the Emperor divided it into the fixed population of *Βαυρυόριος*, the residents who had received the *jus civitatis*, and the floating population that was there for trading purposes only, *κατ' ἐμπορίας*.⁸³ It is certain that the Venetians were fulfilling their obligations under the Chrysobull, for in 1150 we hear of thirteen Venetian galleys in the service of the Emperor.⁸⁴ But the friction between the Imperial Government and the Venetians, which had first made itself felt in the reign of Johannes Comnenus, in 1122, when, '*omissis pateris vestigiis*,' he refused to renew the Alexian Chrysobull, was working steadily towards a more serious rupture. The causes were four in number, all closely connected with the growth of the Venetian Republic, and all acquiring intensity as her course towards her inevitable goal, independence of Byzantium and commercial supremacy in the Adriatic and the Levant, became more pronounced. These causes were, first, the consolidation of the Venetian position in the Latin Kingdom of Jerusalem by the concessions of 1153⁸⁵ and 1167;⁸⁶ secondly, the new policy which Venice was adopting towards the Normans, and her desire to trade with them rather than to fight with them on behalf of the Empire, a policy which manifested itself in and took its start from the convention of 1139, recorded in the privilege of William I., 1165, and which was declared and confirmed by the treaty with William II., 1179;⁸⁷ thirdly, the growing wealth, importance, and troublesomeness of the Venetian colony in Constantinople, where the richer Venetians had begun to form alliances with the Greek nobility, to live outside their quarter, and to disturb the peace by their quarrels with their rivals of Pisa and Genoa;⁸⁸ finally, Manuel was in need of funds, and the wealth of the Venetian colony, which Besta⁸⁹ calculates at not less than two millions sterling, was a tempting prey.

In addition to these practical and immediate causes of friction there

⁸² SS. H. B. Bonn, 1836, Tom. 35, Cinnamus, p. 282. He says the Venetians were '*ἔξω τῆς τοῦ Βαυρυόριος βασιλείας αὐτοῦ ἀναρρομένης ἐμπορίας*.'

⁸³ Cinnamus, *loc. cit.*

⁸⁴ Besta, *op. cit.* quotes, *Archiv. di Stato, Firenze*: S. Giorgio, h. 28, '*ιστορίαν γὰρ τῶν ἡμερῶν ἐν ἀσπίδι τοῦ βασιλέως ἡμετέρου*.'

⁸⁵ T. and T., xii, 133.

⁸⁶ T. and T., xii, 143.

⁸⁷ RR. II. SS., iii, p. 201, Dandolo.

⁸⁸ SS. H. B. Cinnamus, p. 282, '*Ὀλέσθησι Ἀνατολίῃς (i.e. Greece) ὑπὸ τῶν ἑσθίων... ἐκείνην ἐρεῖδε τοὺς αὐτοὺς καὶ κατ' οὐκίαν εἰς ἑαυτὸν ἐκείνην*.' The feeling against the Venetians is clearly expressed by Cinnamus, *op. cit.* p. 280,

'*ὅτι καὶ οὗτοι, ὅσοι μὴ διεσπάρη, συνέλαυνον εἰς τὴν καὶ ἀνατολίαν*.' '*ὅτι καὶ πολλοὶ τῶν αὐτῶν γυναικῶν διεκίχον τε καὶ αὐτὸν προσεκοινοῦντο πλεονεξίας καὶ διεκίχον*.' '*ἡμεῖς τε ὁμοῦ καὶ ἰσχυροὶ ἐκείνην ἐκείνην*.'

Nicetas Choniates, SS. H. B. Bonn, Tom. 39, p. 292, is not quite so hostile, though he calls them '*οὗτοι φελοῦντες ἡμέτερον, ἐκείνην*' and records their '*ἐκείνην πλεονεξίαν, ἀντιθέτως τε καὶ ἐκείνην*.' While the venetian of Eustathius, Bishop of Salernia, addressed to the Emperor in 1174, is charged with concentrated venom and hatred of Venice, which he calls '*ἡ Ἀλμυρὴ πόλις, ἡ χερσὶν ἡμῶν, ἡ πλεονεξία ἡμετέρα*.'

⁸⁹ *Op. cit.* p. 25.

was the further cause of resentment on the part of the Emperor that Venice stood in the way of his dreams for the recovery of Italy. The Republic, in pursuit of her present policy, seemed more likely to prove an obstacle than an ally. She was rapidly developing as the great Italian sea power, and had recently taken a prominent part in the Lombard League. Manuel was resolved to crush Venice; but the memory of the sack of Rhodes, Chios, and Lesbos during his father's reign warned him to be cautious. He began by favouring the commercial rivals of Venice in Constantinople and by urging Ancona to assume a hostile attitude to the Republic in the Adriatic (1166). Further, Manuel had freed Dalmatia from the Hungarians, who had seized the province, and just before the decisive battle of Zeugmin (1167) he sent an Imperial *Dux Dalmatiae* to govern in the Emperor's name. Spalato, Trian, and Ragusa recognised the Greek authority.⁶⁰ Conscious of Manuel's hostility such a step seemed to the Venetians a menace to their supremacy in the Adriatic, and, moreover, the title of *Dux Dalmatiae* was a title of the Doge of Venice since the year 999.⁶¹ The threatening attitude of the Emperor was accentuated and the whole situation forced to a crisis when in 1166, he called upon the Venetians, as vassals, to furnish the usual subsidy for the defence of the Empire against the Normans. (*Tunc Emanuel tres legatos cum tribus gallis mittens Ducem requirit ut solitum subsidium pro Imperii tutela mittere vellet*.)⁶² The Doge refused on the ground, Dandolo tells us, that the Venetians did not wish to break with William and risk their trade in Apulia (*Dux autem pacem cum Gulielmo servare cupiens . . . id facere recusavit; quod Emanuel, grave ferens, erga Venetos malum in corde concepit*).⁶³ The Doge, Vitale Michiel, was aware that by this refusal he had challenged the Empire and incurred the Emperor's wrath; he was aware that the only point where the Emperor could strike at Venice was Constantinople and the Imperial cities; he therefore issued orders, either in 1168 or 1170, forbidding Venetian merchants to enter the Empire (*Dux providens Venetis ne in Romaniam peregrarent universaliter interdixit*).⁶⁴ Whether this was intended solely as a precaution or chiefly as reprisals, as a boycott, is not quite clear; nor is it clear whether, under this order, the withdrawal of the Venetian Colony in Constantinople was contemplated; in any case it is certain that a considerable number remained, and that the orders had the full effect of a boycott. For the Emperor, afraid of seeing his prey slip through his fingers and alarmed at the sudden cessation of trade, sent an embassy to induce the Doge to withdraw the prohibition, and promising absolute security and the usual profit to all Venetians in the Empire. The Doge was persuaded and gave his subjects leave to return. Instantly there was a rush to Constantinople and other cities of the Empire which the Venetians had come to

⁶⁰ Lenz, *Die Entstehung der Vorherrschaft Venetiens an der Adria*, Strassburg, 1897, p. 32.

⁶¹ *RA.H.58*, Tom. xii, p. 227.

⁶² *Ibid.*, p. 231.

⁶³ *Ibid.*, p. 234.

⁶⁴ *Ibid.*, loc. cit.

consider as their own peculiar domain and at first they were well received, the Emperor concealing his real intentions under a cloak of benevolence (*Ubi et anidi et Imperii loca propria habitacula reputantes cum numerosis navibus, hominibus et mercis oneratis ad varia loca Græcorum perrecesser. . . Qui primo benigne ab eo recepti*).⁹⁵ The trade of Constantinople revived and the Venetians, all intent on traffic, had no suspicion of what was in store. But the Emperor was maturing his plans: Troops poured into the city as though it were preparing for a siege, and secret orders had been issued to the governors of the various towns. The leaders of the newly-arrived Venetians Sebastianus Ziani and Anrius Mastropetro, however, received warning from certain friends of the Venetians⁹⁶ that the Emperor was playing them false. They sought an audience and said, 'We have heard, but we do not believe, that your Imperial Majesty is plotting mischief against the Venetians.' The Emperor publicly and solemnly denied any such intent and caused a proclamation to be made throughout Constantinople that he would hang anyone who dared to molest a Venetian.⁹⁷ But troops continued to pour into the city and to man the walls as though for a siege (*Maxima militum peditumque multitudo ex diversis partibus tunc Constantinopolim venisset, et essent muri ac palatia adeo munita quasi deberet civitas ab inimicis expugnari*).⁹⁸ Then suddenly the Emperor struck (*subito irruit imperator in Venetas sicut leo*). On the 12th of March, the Feast of S. Gregory the Great, 1172, the order to arrest every Venetian in the Empire and to confiscate their goods was carried into effect. The number in Constantinople was about ten thousand (*inventi sunt enim in Constantinopoli eo tempore fere decem millia Venetorum*).⁹⁹ and the prisons being incapable of holding them all many were sent to the monasteries.¹⁰⁰ They were presently released on bail owing to the difficulty of keeping so many prisoners. The property of the Venetian colony in Constantinople was deposited in the Imperial fisc, but it seems that the larger part was fished by the officials.¹⁰¹ The total value, according to the Venetian claims for damages, was estimated at at least two millions sterling.

We know that some of the Venetians managed to escape from Halmira, in Thessaly, with twenty ships,¹⁰² perhaps before the blow fell; while one great ship, the 'Totus Mundus,' or 'Κόσμος,' the largest ship ever seen in Constantinople, managed to fly by night with many Venetians, chiefly bachelors,¹⁰³ on board. The Greek ships pursued her, and the Warangs on board them tried to burn her with Greek fire, but the Venetians hung hides soaked in vinegar round the bulwarks and the fiery bolts were either extinguished by the vinegar or flung back into the sea. The wind was fair

⁹⁵ *Ibid.*, loc. cit.

⁹⁶ *M.M.G.H.*, tom. xiv, p. 78.

⁹⁷ *Ibid.*, loc. cit. The *Historia Ducenti* and a *lancia aspidot* from the *Chronicon Justinianum*.

⁹⁸ *M.M.G.H.*, loc. cit.

⁹⁹ *M.M.G.H.*, loc. cit.

¹⁰⁰ *Clunianus*, loc. cit. 'propter et ad ipsa muros dixerat puerorum.'

¹⁰¹ *Nicetas*, loc. cit., 'et tanta de eis remota xolera habebatur.'

¹⁰² *M.M.G.H.*, loc. cit., p. 79.

¹⁰³ *Nicetas*, loc. cit., 'aditum ei ad ipsos Androsos.'

for the 'Totus Mundus'; she 'seem to fly rather than to sail' ('ἵπτασθαι δοκεῖν ὁὐ ναυτῖλλεσθαι'), and, outdistancing her pursuers, eventually reached Acre in safety.¹⁰⁴

When the news of Manuel's treachery reached Venice the Government was inclined to adopt a pacific and diplomatic line of conduct. It had already been decided to send an embassy to Constantinople to ask for explanations. But the arrival of the twenty ships from Halmyra, with their detailed report of the outrage, set the spark to popular passion. The Government was swept off its legs and war against the Empire declared. The disastrous course of that war, the Emperor's shifts and delays, the interminable embassies, the decimation of the Venetian fleet by plague at Chios, the return and murder of the Doge, do not strictly belong to the subject of this paper.

Manuel, alarmed at the growing understanding between Venice and the Normans (1173),¹⁰⁵ and feeling the losses inflicted on his revenue by stagnation of commerce, and probably anxious to devote his whole attention to the campaign against the Turks in Asia Minor, endeavoured to patch up a peace, but died (1180) before achieving his object.¹⁰⁶ Andronicus, who had usurped the Empire, hastened to come to terms with the Republic. He is said to have released the Venetians still prisoners in Constantinople and to have promised compensation for loss,¹⁰⁷ in annual payments. He actually began to discharge his obligations; a first instalment of one hundred pounds of perperi, that is, seven hundred and twenty perperi, was paid in 1185,¹⁰⁸ and this sum was distributed among the claimants. The agreement as to compensation for damages, whether it was made by Manuel himself or by Andronicus, consisted in the payment of one thousand five hundred pounds of perperi in six annual rates of two hundred and fifty pounds each.¹⁰⁹ To this agreement the Venetians attached great importance, and their relations with the Eastern Empire down to the close of the century were chiefly concerned with the endeavour to enforce it. They succeeded only to a very slight extent, and, as Besta acutely suggests, the unpaid debt may have had much to do with the diversion of the Fourth Crusade.

The position of the Venetians in Constantinople improved considerably during the reign of Andronicus. By 1184, at least, they seem to have resumed occupation of their Quarter, and we find them leasing shops.¹¹⁰ When Isaac Angelos came to the throne (1185), by the murder of Andronicus, diplomatic relations were reopened. The Doge, Aureus Mastropetro, sent an embassy consisting of Petrus Michiel, Octavianus Quirini, and

¹⁰⁴ T. and T., xii. 168.

¹⁰⁵ T. and T., xii. 172. Nicetas, *loc. cit.*

¹⁰⁶ Besta, *op. cit.* p. 18. Nicetas, *loc. cit.*, says that the Venetians suggested the annual payment of 150 libras of perperi, 'ἀπὸ δὲ ἀπὸλλοῦς χρυσίου περπερίων.'

¹⁰⁷ *RE.HSS.*, Tom. xii. p. 309.

¹⁰⁸ Besta, *op. cit.* p. 19, quoting Arch. Franc. S. Zaccaria, h. 22.

¹⁰⁹ Besta, *op. cit.* p. 18, holds that this was a compensation for *lucrum cessans*, over and above the restitution of goods; but the goods were no longer in being, and as Nicetas says, the Venetians 'ἐπὶ πλεῖσιν ἀρταρίαις καὶ κλειδαῖς χρυσίου χρυσίου εἰσέτις,' and accepted the 1500 pounds of perperi in compensation 'χρυσίου περπερίων.'

¹¹⁰ T. and T., xii. 172.

Johannes Michiel, for the double purpose of renewing the Chrysobull and recovering the compensation; they accomplished the first, but met with delay as to compensation.¹¹¹ By 1187, however, they had secured three Chrysobulls; the first contained the renewal of the privileges of traffic and commerce in the Empire conceded by the Chrysobulls of Alexius I., Johannes, and Manuel, which it recites verbatim. Certain phrases in the exordium to this Chrysobull indicate clearly the position which Venice now held towards the Empire; it is no longer a question of '*veri et recti duli*,' but of '*Venetici non nunc primo Romeis federati amici*,' '*nec nuper eorum amicis fautoribusque connumerati*,' '*accedentes fautores non vocati*,' who, however, in times past had been vassals '*non enim tunc solummodo Romeis servi erant, verum etiam aliis temporibus et locis*.'¹¹² The second Chrysobull confirmed the possession of the Venetian Quarter as conceded by Manuel, whose Bull is recited.

The third Chrysobull is of the nature of a defensive alliance between Venice and the Empire. Venice pledges herself to furnish from forty to one hundred galleys within six months of notice given. Venice to furnish ships and crews out of funds remitted by the Imperial fisc. The commanders to be Venetians, but to take an oath of allegiance to the Emperor. This fleet is bound to serve against 'all crowned or uncrowned heads or nations or peoples' who may venture to attack the Empire, except against the Germans as long as the existing Veneto-Germanic treaty runs, and against the Normans as long as the Veneto-Norman treaty runs, that is, for seven years and nine months from the first of January, unless within that period King William shall attack the Roman Empire, in which case the Venetians shall come to its aid with fifteen galleys within four months of notice given.

The tenor of the Chrysobull is obviously governed by dread of a Norman attack and the imperative need of Venetian assistance at sea. Its form differs from that of all preceding Chrysobulls. It is a *pactum*, not a *præceptum*, a bilateral convention or treaty; the Venetians are a contracting party; they speak of '*stolus vester*,' and '*stolus celestidinis vestre*' (i.e. the Emperor) is distinguished from '*Venicorum stolus*'; if the Empire makes peace or truce with any Power against whom the Venetians have been fighting on its behalf, the Venetians shall be included in such peace or truce; in all places captured by the joint fleets the Venetians are to have a church, an exchange, and wharf free of dues, and the privileges under earlier Chrysobulls are to be renewed. There is a bargain; in return for the use of their fleet the Venetians acquire substantial advantages.

The Emperor's needs and alarm made him ready to agree to such a bargain; but on the more thorny subject of compensation he procrastinated (*in longum traheret*)¹¹³ under the growing insistence of the Doge Aureus Mastropetro. The position of Venice was strong and menacing, for in 1188 she had issued orders for the concentration of her fleet at Venice by Easter

¹¹¹ *RR.II.SS.* xii. 315; Dandolo. ¹¹² T. and T., xii. 179. ¹¹³ *RR.II.SS.*, Tom. xii. p. 314.

of the following year with a view to an expedition for the recovery of the Holy Land¹¹¹ and this fact may have counselled Isaac Angelos to yield. At any rate in 1189 he agreed to 'satisfy Venice on those points on which we have already passed our word, namely, as regards restitution of Venetian goods seized by the Emperor Manuel, and as regards the offer of fourteen hundred pounds of perperi, which, over and above the restitution of goods, was promised to them on the grounds set forth in the Chrysobull on the subject, and of which one hundred pounds have been paid.'¹¹² But the goods had long disappeared, and their restitution was impossible. It was therefore proposed to give the Venetians a yearly revenue of fifty pounds of perperi secured upon the exchange, the dues and the wharfs lying adjacent to the original Venetian Quarter. To the fourteen hundred pounds of perperi still due the Emperor adds another hundred, making sixteen hundred pounds in all, of which fifteen hundred are still due; of these, two hundred and fifty are to be paid at once (and have been paid) and the rest at the rate of two hundred and fifty pounds a year for six years.

But beyond this first instalment of two hundred and fifty pounds nothing was paid; and this may account for the fact that in 1196 the Venetian fleet at Abydos resolved, on its own initiative, to remain at Abydos ('*videntes nos, valde esse congruum et necessarium, stare cum supradicto stolo in Romania*'), trusting their action will be approved by the Doge and people of Venice.¹¹³ Alexius III., who succeeded Isaac Angelos in 1195, showed no greater alacrity in payment of the compensation. He adopted the usual methods of the Byzantine Court, negotiations and embassies; but the fear that Venice might espouse the cause of Alexius the younger, his nephew, son of the deposed Isaac Angelos—as indeed she did eight years later—caused him reluctantly to grant the Chrysobull of 1199.¹¹⁴

This Chrysobull recites and confirms the Bull of Isaac as regards the defensive alliance with Venice; it renews the trading privileges, records the districts where those privileges shall be valid, and adds a number of new provisions as to the status of the Venetians in the Empire. The boundaries of the Venetian Quarter remain unchanged, apparently no mention is made of the compensation, and we hear no more about it till the whole question is absorbed and disappears in the Fourth Crusade, the sack of Constantinople, the fall of the Roman Empire, to which it was no doubt a contributory cause.

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¹¹¹ T. and T., xii. 204.

¹¹² T. and T., xii. 207, 'vnde flect in redituone rerum que Venetici ablati fuerunt et exactionibus centenariorum quattordecim hyperperorum, que ultra eam ipse promissa sunt ob causam, que in crishulo per huncdem edito notificatur, ob quas et nunc centenarium hyperperorum eis per impensum est.' This seems to confirm Bessé's contention that two compensations were promised; (1) the restitution of goods and

ultra eam 1500 pounds of perperi, called 1400 here as 100 had been already paid by Andronicus. The Chrysobull here referred to does not exist, but it probably was the agreement said to have been made by Manuel or by Andronicus; we cannot therefore tell what the ground of this further compensation was, but it may well have been of *lucrum* *commerciorum*.

¹¹³ T. and T., xii. 217.

¹¹⁴ T. and T., xii. 246.

MILITARY OPERATIONS ON THE NORTH FRONT OF MOUNT TAURUS.

[PLATE IV.]

I.—THE MARCH OF XERXES ACROSS ASIA MINOR.

THE route by which the army of Xerxes marched across the plateau of Anatolia has never been determined with certainty. On general considerations it may be stated with perfect confidence that the army crossed the Taurus by the pass of the Cilician Gates. The reasons are conclusive; there was, in fact, no other way, and the matter is so generally admitted as to need no discussion.¹ Thereafter the great army gathered on the north side of Taurus at a place called Kritala in Cappadocia (Herodotus, vii. 26). Whether Kritala was a town or a locality (such as a plain with a river) is not stated; but, taking into consideration all the conditions, one can say with certainty that it was situated either in the fertile plain of Tyana or in the equally fertile and well-watered plain that lies between Kybistra and the lake called in modern times Ak-Gyol. The next point stated exactly by Herodotus in the route of the army is Kelainai at the source of the Maeander. The question is how the journey was performed between those points, the Cilician Pass on the east and Kelainai on the west.

Herodotus says that the Persian troops crossed the Halys into Phrygia and traversed that country until they reached Kelainai. In discussing this route in *H.G.A.M.*, pp. 36-41, I accepted that statement after a good deal of hesitation, stating the doubt, on account of the great detour involved, whether it was not a mere error introduced by Herodotus in the lack of exact knowledge. In the end, however, I accepted the statement which would imply that Xerxes marched along the famous and ancient Royal Road, but years of consideration and growing experience of the conditions governing the possibilities of marching across Anatolia, force me to the conclusion that Herodotus inserts the reference to the Halys without definite authority, merely because the Halys was the river of boundary between Phrygia and

¹ The construction and importance of the road through the Gates, as a determining factor in very early history, and its connexion with the 'Sons of Javan' (the Old Ionians), marked especially by the names Mysians and

Amphidokhos, are described in *The Cities of St. Paul*, pp. 113 ff., and the course and the mediæval history of the road are treated in a paper in the *Geographical Journal*, 1903, pp. 237-413.

Cappadocia.¹ This statement is an ornamental touch designed to give liveliness and detail to a narrative of march, which (except at Kelainai) was singularly bare and devoid of such lively details as Herodotus loves: much of the value of his narrative lies in these personal details of human character and conduct, which usually throw a brilliant light on the life of the times and surroundings of the central facts. It must seem to anyone who reads the passage that Herodotus had practically no information with regard to the route traversed between Kritala and Kelainai.

It would not be easy to explain why the army marched by a route which increased so greatly the distance, the time required, and the difficulty of finding provisions and water. In *H.G.A.M.*, pp. 36-41, I sought an explanation in the compelling influence of the old and familiar 'Royal Road'; but better knowledge has forced me to abandon this view. If the army crossed the Halys it would have had no possible path except to march round the northern side of the great salt lake and of the dry region which extends around that lake for a great distance in almost every direction (i.e. to follow the line of the 'Royal Road'). The region on the west side of the lake was called in Kiepert's older maps the 'salt desert,' and was there described as waterless, though it really is easily traversed in every direction by small parties, because there is sufficient water even at the present day for a small population and for a few travellers; but in order that an army should find sufficient water it would have, so far as possible, to keep away outside and north of the dry region; and while it could march through the region afterwards called Galatia, especially through the Haimané,² where there are flowing streams and sufficient supply of water, yet it would be very far from easy to cross Cappadocia from Tyana to the Halys, and it is also a quite unacceptable theory that the army deserted the 'Royal Road' somewhere in north Phrygia and turned south again to Kelainai (see below).

Moreover Herodotus speaks about Xerxes as simply crossing the Halys. If Xerxes followed this northern route, either he must have crossed the Halys twice, or he did not cross it at all: the best way for the march after the army reached the Halys was to keep along the left bank as far as the line of the Royal Road where it crossed the river, and then keep west through Galatia, where rivers would supply water. The idea therefore that Xerxes crossed the Halys at all must be dismissed. Whatever road he took he did not require to, and would not, cross the river. I have traversed almost every mile of the ways on various journeys and speak from personal experience in reference to the natural and inevitable line of march for an army from Tyana into Galatia, or (as it was then) north-eastern Phrygia.

Another consideration must be taken into account. The 'Royal Road' in its western section, passing through north-west Phrygia and reaching the

¹ *Herod.* i. 72.

² Both the Byzantine Military Road and the very ancient 'Royal Road' used the Haimané route (*H.G.A.M.* ch. G and p. 31). It is true that Gelsee (and following him

others) make the Hymanine Road pass right across the dry region; but they do not take note of the practical facts that determined marching possibilities.

Hermos valley, presents considerable difficulty to the march of an army; and formerly I resorted to the supposition that in order to avoid this difficult section of the Royal Road Xerxes diverged far to the south so as to reach the sources of the Maeander at Kelainai (*H.G.A.M.* pp. 39-41). It would be necessary on this supposition for the army to make not merely a second very long detour, but also to traverse rather waterless country. The route, however, would not be wholly impossible; for there is moderate but not abundant water along the route: this part of Phrygia was doubtless well cultivated, and could supply food, grown within moderate distance of the march. It is assumed that considerations of water supply determined the exact route: food could be carried, but not water in sufficient quantity.

The detour is enormous, however, and considerations of distance and marching possibilities show that this supposition of a northern route cannot be seriously entertained. The army did not cross the Halys or go through northern Phrygia.

Another route then suggests itself. Did the army march through central Lycania, south of the salt lake Tatta, following the line which was so important in later history and which may for convenience be called the 'Central Trade Route'? This supposition also must be dismissed with brief remark. The line of the central Trade Route is far from the shortest way from the Cilician Gates to Kelainai, though it is much shorter than the northern route. Moreover, in certain sections, and especially in that which separates Tyana or Kybistra from the eastern part of the Trade Route, the water supply is scanty and the country unproductive; and this line would be chosen only if there were no other possible. This point need not be worked out at length and in detail. We have been over the whole way and the opinion here expressed is forced on me by our experience. It is a route for travellers and trading parties, not for armies. The shortest line may be called the 'Syrian Route,'* from the Gates to the best point of junction with the Central Route. The 'Anabasis' with its strange zig-zags, illustrates the unsuitability of the Central Route.

There was, however, a route which is the shortest, and which leads almost continually through fertile and highly cultivated country, furnishing abundant water supply at very frequent intervals. This is the southern route, or Pisidian road, although (to be more accurate) it leads through Lycania and Phrygia to a greater extent than through Pisidia; but it may be called the Pisidian road on the same principle as Antioch was termed the Pisidian city, because it was situated in Phrygia-towards-Pisidia and was intended to defend the Phrygian country against the Pisidian raiders (see *J.R.S.*, 1917, p. 242).

Kritala then must be the name of some locality, region or town, near Kybistra and the Ak-Gyol, a region highly suitable for the assembling of an army. Troops coming from the east would concentrate here, and

* The Syrian Route reaches the Central Route near Suverik (Peshila), passing through Kybistra Kara-Bunar (Hyde?) Kama (Kana) and Gelmir (Perta).

it lies at the western exit from the pass of the Cilician Gates by way of Kybistra. It is indeed high and in winter cold; and if an Oriental army concentrated here (or in the valley of Tyana) the soldiers would suffer greatly from cold and diseases consequent on exposure and crowding. Naturally, however, the concentration was so arranged that no large body of troops was detained long at Kritala, and the march was made in such a way that division after division (1) moved forward through the southern edge of Lycaonia by Laranda and the fertile lands near Taurus, (2) along the course of the river which flows east down through the mountains to Lycaonia from the two great lakes, Katialis and Troglitis, (3) then round the east and northern coasts of Karalis and the Limnai and (4) up the river Hippophoras. The road would leave the site of the future city of Antioch on the right and pass close to the site of the future city of Apollonia on the last mentioned river. (5) It would come down from the hills on the great fountains called Auloerona,² a landmark in history and in mythology, where many years later the Roman army of Manlius bivouacked on their northward raid into the Galatian country. (6) From these fountains the march to Kelainai is easy, and in truth there is no other way except through Kelainai.

Anyone who traverses this road, recognises at once that it imposes itself as the necessary and unavoidable line of march for a large army; small forces and mounted raiders (like the Arabs in the long wars 660-960 A.D.) have a choice of ways from the Cilician Gates Pass; but the great army had only one route possible. Both food and water are abundant on the 'Pisidian Route,' for this way traverses a series of highly cultivated and fertile regions and valleys with very little unproductive land, and is nearly on a level the whole way, crossing only one hill pass that presents any difficulty, and this pass is short, coming down on the Fontes Aurocreni from the sources of the Hippophoras.

The army must of course have marched in detachments; and the quaint story told by Herodotus (vii 60) about the way of counting the numbers of the army proves that each body consisted of about 10,000 men. Grote, who sometimes shows unbounded credulity in matters belonging to what he considered the historical period, combined with unjustifiable scepticism in respect of the period that he counted mythical and regarded as containing no trustworthy fact or date, holds that Herodotus's story can be accepted and that the number stated is approximately correct, except that the number of slaves and attendants must be cut down. If Herodotus, however, could err in such an essential fact as the number of attendants, the story as a whole loses verisimilitude. It probably has no other basis than the numbers in each detachment of the army. The army marched in bodies of 10,000: that was the historical truth. It would be difficult, or rather impossible, to manœuvre and feed a larger body of troops at any one point on the same day. A very large number, such as the Persians sometimes collected, only impeded

² Retreat to Iery, xxviii. 15: the district is Aurokris, Anukris, or Aurokha.

itself, and was rather a source of weakness than of strength.⁸ The idea that five million, or even two million, of men could march in one body on one day, and encamp together, which seems to have been the idea of Grote and various other historians, is incredible. It would take many days for an army of such a size to traverse any of the narrow though easy passes on this route, and there would be no possibility of feeding or watering such a body. Juvenal's statement that rivers were drunk dry by the marching armies is simply an expression of the impossibility of the case; and so with the other bold inventions that 'lying Greece dared to concoct'.⁹ On the other hand, there is no reason to doubt that the army was very numerous, far beyond anything else in ancient time.

If we describe this Pisidian route in terms of Anatolian geography, which was founded on the divine law and ritual, and which regarded the whole land as portioned out under the presidency of local manifestations of the divine power, the army assembled under the protection either of the god Sandan-Herakles, who is pictured on the rocks beside the great fountains at Ibriz, or of the deity who was resident at the hot springs four hours north of Kybistra.¹⁰ The abundant waters of Ibriz, flowing down into the plain past Kybistra, turn this corner of Cappadocia, where it meets Lycania, into a garden; they were the gift of the toiling god for the benefit of mankind generally and of the army on this particular occasion.¹¹ It was really the same god that was manifested at the hot springs which, in the Graeco-Anatolian world, were so frequently attributed to the beneficence and labour of Herakles, and connected with his name. The river of Ibriz unites with the stream which flows from the valley of Tyana to form the lake of Ak-Gyol, and any water that comes from the hot springs unites with the latter stream.

Thereafter the army was protected by the god who ruled at Laranda, doubtless Herakles, pictured on coins of the city. Next on the route comes the god of Derbe, again in all probability a local variety of the same god Herakles-Sandan, as the rare coins of the city show. The god of the Homnadaei¹² next welcomed the army as it passed through the wonderful cañon of the 'River of Underground Springs' (Ibn Khordadbeh), and reached his territory, rich and fertile, on lake Trogitis. Thereafter comes the land of Mannes, the country of Ouramma or Oiroda, one of the greatest and wealthiest Anatolian gods, who ruled a wide land and great numbers of temple servants. His country probably included all the western shores of lake Karslis and of the Lannai, with the rivers that flow down from Mount Olympus (Sultan-Dagh) into the lake region.¹³ In Graeco-Roman times he

⁸ If Cyrus the Younger restricted his army on the Anatolia to 10,000, that was not because he could not have collected a larger force, but because this was the known maximum for a marching force in one body.

⁹ Herodotus mentions only the little stream Melas as exhausted by the army, but there is some truth under the 'lie.'

¹⁰ I have never visited these hot springs,

but mention them on the authority of Hamilton, *Researches in A.M.* ii. pp. 304-308.

¹¹ On the Peasant God of Derbe see *Lake the Phrygian and Other Studies in Religious History*, p. 174.

¹² Between Derbe and the Homnadaei there was a nation of Isaurians and.

¹³ *J.R.S.* 1918, pp. 148 ff.

was more famous as Men of Antioch, and a local variation of Men was Mannes or Zeus Ourudamēnos on the north coast of the Limnai.

Calder¹² has published a remarkable inscription dedicated to the god in the country of the Homanadeis in his divided form as the supreme Zeus and the messenger Hermes, which we copied at Balyklawa. In *J.H.S.* 1918, pp. 144-151, I have had a great deal to say about the religion of Mannes, the neighbouring god to him of the Homanadeis. As it chanced, evidence with regard to this religious centre is considerable, and yet the actual situation of the primitive sanctuary has never been discovered. Monuments relating to the religion, however, are numerous, and have been published in a variety of articles.¹³

The next deity who gave hospitality to the marching army was he who ruled and helped the people in the valley of the Hippophoras, where are the springs and healing water of Hercules Restitutor. This fountain apparently was his central home at the old township of Tumandos, which for a time was submerged by the Oneco-Roman city Apollonia, but which was recognised throughout history, and even by the few Apolloniate Christians of the present day, as the holy place of the valley. From the valley of Hippophoras the line of march led over a pass which at its highest point is rather narrow, and then descended by a very steep road into the upper Masander valley, where lie the great fountains and the scene of many legends connected with the city of Kelainai, as e.g. the invention of the flute by the goddess, and the fate of Marseyas who picked up the musical instrument that the goddess had thrown away.¹⁴ From this point onward the route coincides with the Central Trade Route and leads through well known Phrygian country.

It would require far too much space here to dwell on this religious geography. The evidence in each district is founded either on coin types, or on sculptural reliefs, or on geographical considerations, or on inscriptions.

Along the whole way there is no marching difficulty. Although the route leads close to the front of Taurus and is frequently bordered by hill country or even high mountains on either hand, yet it is almost continuously level. The height above the sea is uniform, varying from 3,300 to 3,700 ft. except at two points. There is a ridge separating the valley of the Anthios (which flows by Antioch) from the valley of a neighbouring river which, like the Anthios, also flows into the Limnai; but this ridge is a gently swelling elevation which presents no difficulty even to wheeled carriages, though the road crossing it rises to nearly 4,000 ft. Again the passage from the valley of the Hippophoras to the valley of the Masander presents a certain difficulty, as it is narrow at the water-shed, which is over 4,000 ft., but to an army marching from the east the ascent is gradual and easy, and the steep descent

¹² *Class. Rev.* 1910, p. 76.

¹³ See *J.H.S.* 1883, p. 23 ff.; which improved in *Studies in the Eastern Roman Provinces*, pp. 305-377; *E.S.A.* 1912, p. 64; *J.H.S.* 1912, pp. 151-170. Mannes Ourdamas, the old Anatolian god, became the Hellenised Men of Antioch; but his sanctuary

on a peak above the city is a Hellenistic foundation. The old sanctuary was 'in the region of the Anthiokhina' (Strabo, p. 557), perhaps in the ridge called Snake's Head.

¹⁴ *J.H.S.* 1883, pp. 68 ff.; *C.B.Phr.* II, p. 430.

on the western side is much more easily traversed than it would be to an army marching eastwards. Cyrus the Younger avoided this pass on the Anahast, turning away from Kelainai towards Peltai on the north-west, although the ostensible pretext for his march was that he wished to punish the Pisidian raiding mountaineers: thus he came for part of his route to the central Trade Route, rejoining the Pisidian Route by way of Iconium and Laranda, and thus taking advantage of the fertile south Lycæonian land.

The road by which Xerxes marched was a historic highway of the greatest importance. Its use begins with the dawn of organised communication in Anatolia. In *H.G.A.M.* p. 57, it is briefly and incompletely included because, when that book was written, I had not had the opportunity of exploring it, and much of it lay through unknown ground. So far as I am aware, its complete course has never been described until now. In 1882 I travelled along it from Kelainai-Apameia to Kiril at the north-eastern corner of lake Karalis, and there diverged from it, following the line of the Roman Road, a *Via Sebaste* built by Augustus in B.C. in the organisation of the country that followed after the Homanadensian war.¹² Augustus preferred this route to the longer course along lake Trogitis and through the great Aulon, or cañon, which leads eastwards from its south-eastern end, because his object was to reach the colony of Lastra or Lystra, which was one of his new foundations intended to guard the southern frontier of the province Galatia. I wrote in 1882 a description of this road, incorporating various inscriptions and several milestones along its course; but the paper was based on too scanty evidence, and was postponed in the hope of making further discoveries in the future; the material was all placed at the disposal of Moqmsen for the Supplement to *C.I.L.* iii. The only parts of this paper which were published were a short article in *J.H.S.* 1883, p. 23 ff. and another in the *Athenische Mittheilungen*, 1883, p. 71.

On the old Pisidian Route there were at least three separate well-marked passes or *kleisourai* all of which bore the name Aulon. One is the long cañon which extends east and west from the south-east end, of lake Trogitis, in ancient times carrying the water of that lake to join the river of Isaura and through it to the plain of Konia, and in modern times carrying the great irrigation channel that has been once more opened up. A second Aulon stretches between lake Trogitis and lake Karalis. No reference to these two 'tunnels' is, so far as I know, contained in recorded history, except the words of Strabo p. 569. The route of Xerxes' march traversed both. They are extremely fertile with abundant never-failing moisture; and the first has a temperature almost tropical in summer, for the cañon leads east and west, and is exposed to the sun all day, while the perpendicular rocky sides radiate the heat on to the moist soil and retain their heat throughout the night.¹³

¹² This route was certainly in use before Augustus, as it is required to connect Iconium with the west.

¹³ I have not traversed the second Aulon, south of Mochia; and it was only in 1909

that we traversed the first remarkable cañon, being as I believe the only explorers that have gone through it. For the Aulon from Karalis to Trogitis I depend on Stronitz's careful and detailed account and map.

There is a third Aulon on this route; for the section of this great highway between the west and the east was called the Pisidian Aulon.¹⁷ The word Aulon has a special geographical character. It seems to be applied to a pass leading out of open country into open country. It is literally a funnel. It does not denote a glen opening down from a higher background of hill or mountain into low country. The Pisidian Aulon was situated at the northern edge of the Pisidian country, being a pass or *klaissoura* which leads up from the north-east end of the Limnai towards Antioch. The pass is in a sense easy and open. It is bounded on the south by a low but steep ridge, which bore the name of Snake's Head and which at its western or south-western end projects far out into the Limnai. On the northern side the Aulon is limited by gently swelling hills which rise towards the northern mountain ridge, called in modern times Kara-Kush-Dagh, Eagle-Mount.

The soldiers of the Third Crusade in 1190 A.D. commanded by Barbarossa, passed in their march along the valley of the Hippophoras and the north bank of the Limnai and up the Aulon. They were harassed by the Turks on their passage through the Aulon, and when they emerged from it on to the open country close to the village of Gondane they saw a large Turkish army on the gently sloping but rather lofty ridge which separated them from the valley of the Anthios and the town of Antioch. Their natural course lay across this ridge, but the attempt to force a passage in the face of a considerable army occupying such an advantageous position, light-armed indeed but for the most part mounted and able to charge down the slope on the infantry of the Crusaders, was too dangerous. The chances were great that the light-armed Turkish cavalry would overpower the already weary crusading forces. In this dangerous situation the Crusaders were saved by a captive, who promised to lead them across the hills of Kara-Kush-Dagh on their left hand northwards, so as to join the Central Trade Route and then pass round the north-west end of Sultan-Dagh (Mount Olympus) and so on through level country to Iconium, the Turkish capital. The delicate operation of maintaining a front against the Turkish forces while transferring the army to a new route was safely accomplished. It was probably aided by the confident belief of the Turkish leaders that there was no other way, and that Barbarossa (like Manuel Comnenus in 1176) had fallen into their trap. We may conjecture that the most critical part of the operation was carried out by night, and that a rearguard maintained the show of resistance, while the rest of the army moved across the narrow and difficult but feasible pass that separates Kara-Kush-Dagh from Sultan-Dagh. With this operation the march of Barbarossa passes out of our subject, but it gives the clue to the locality of that great disaster in which the splendid army of emperor Manuel Comnenus was destroyed by the Turks in 1176. The Crusaders as they marched along the Aulon saw and were horror-struck at the remains of that great disaster, and this carries us back

¹⁷ *J.H.S.* 1913, p. 144.

14 years to the actual event, which was decisive in the history of the wars between the Byzantine Empire and the Turks for possession of Western Anatolia. The whole of the plateau and even part of the low country as far down as Nicaea on the north-west had been abandoned to the Turks after 1071, when the emperor Nicephorus Botaniates seems to have bought their support in the contest for succession to the empire by giving up to them a great part of Anatolia. Two successive emperors, the crafty Alexius and the brave and skilful John Comnenus, attempted to repair the treachery of Nicephorus. Alexius chose to advance direct from Constantinople by way of Dorylaion, but John conducted his operations against the Turks, whose capital was at Iconium, along the line of this Pisidian road by way of Laodicea, Apameia, Apollonia and the Aulon.¹² John had carried the Byzantine arms as far as the Limni; captured the town of Apollonia, which in Byzantine times bore, on a neighbouring site, the name Sozopolis. Manuel carried on the war in a somewhat fitful way. He was personally courageous to the verge of rashness, but he showed little or no strategic qualities. There is no evidence of any concerted plan in his operations throughout his reign, as there is in the case of his father and grandfather; but at last with a great army containing the flower of the eastern troops together with considerable contingents of Normans and Varangians he essayed the great task of a march direct on the Turkish capital. Evidently the thought of resistance on the part of the Turks had no place in his calculations. He regarded his march as being intended for the capture of Iconium, and he encumbered his army with a siege train which was far from suited for active operations in any preliminary battles against Turkish troops.

Other operations and negotiations relating to the Aulon beside the Limni are briefly mentioned in a note to *J.H.S.* 1918, p. 144.

A fourth Aulon on this road may deserve a word of notice, although there is no reference made by any ancient authority to it, or to the use of the term Aulon in respect of it. This is the passage leading from the plain of Kara-Aghatch to the plain on the north-east of Bey-Sheher lake, at the southern end of the passage is a locality called Monastir, the name of which is reminiscent of pre-Turkish society, though we failed to find any justification for the title. This level easy pass between rocky hills on each side leading from one valley to another corresponds exactly to the meaning that Strabo seems to attach to the term Aulon. The pass slopes gently down to the south in the greater part of its course. It seems probable that Strabo in referring to the Aulons which ran out from Trogitis had in his mind the thought of more than two. This may be an inexact reference to the existence of so many Aulons on the course of this important road which leads along the coast of Trogitis. Strabo, without any doubt, had never seen this mountain region and it is quite in accordance with the vagueness of his description of this region, taken in conjunction with the

¹² It is not certain that John ever reached the Aulon; probably he did not carry his arms beyond the Limni. Even Apameia

was exposed to the coving Turkish nomads at his death.

essential truth of all that he says about it, that he might have supposed the four Aulons to be very closely connected with Trogitis, as two of them obviously are, while two are closely connected with Karalis and one with the Linnai. On the other hand the high pass crossing from the glen of the river Hippophoras to the valley of Aurokra wants the essential features of an Aulon. It is a mountain pass leading gradually up westwards to the summit of a high ridge and sharp down the other side.

The existence of this remarkable route whose character and continuity has never before, so far as I know, been observed, and which has long ceased to be a route for communication, goes back to a very early origin. It belongs to a time when Iconium was not a principal city in Lycania. In truth Iconium does not lie on any great line of communication. It was the superior advantages of the site and the excellent water supply, and its convenience as the capital of an extensive and fertile plain, guarded by the great fortress on the hill of St. Philip (Takali) throughout at least Byzantine times, that gradually made Iconium into a principal city of Anatolia and the capital of Lycania (although it was in nationality a Phrygian and not a Lycanian town). Its natural advantages, however, are such as to have made it a centre of population, though on a small scale, from the beginning of organised society. It was still a small city in the time of Strabo, who had not himself actually seen it, but speaks in a vague way of it as situated somewhere in those regions. Great stress is to be laid on his curious expression 'somewhere.' This is to be contrasted with his expression as an eye-witness about Sostra on the opposite side of Boz-Dagh, twelve hours from Iconium, where he can speak about the water being sold in the streets by water carriers to the thirsty population, a unique fact apparently in his experience. He does not actually say that he had seen this with his own eyes, but the expression is so marked and peculiar as to suggest that it springs from eye-witness.

As the importance of Iconium increased it attracted the roads to itself, and although some of these had to pass through considerable extent of dry and therefore unproductive soil, yet they came to surpass in importance the old road through the fertile lands of the south close to the foot of the Taurus, even although this latter road presented so many advantages in respect of marching purposes, of water supply, of abundance of food and fertility of soil, and offered a path from the Cilician Gates to the west not much longer than the shortest way through Iconium and distinctly shorter than the longest way round by the Royal Road. The ancient road through the Aulons by Trogitis, however, did not pass entirely out of use until Turkish times.

I have attempted to make this account of an important road clear by an accompanying map, showing on a larger scale the middle of the road and the country traversed by it, with Antioch as the capital: the whole line of the principal roads along the Taurus Frontier can be readily gathered from Anderson's or Kiepert's map. We know these in respect of the Roman period when this was the frontier of the province Galatia on the south.

II.—SKETCH MAP ILLUSTRATING THE MILITARY ROADS ALONG THE PISIDIAN FRONTIER.

In order to elucidate the importance and increase the intelligibility of the map (Pl. IV.), the following notes on a somewhat extended scale are required. The country is obscure and little traversed as a whole. Isolated expeditions have gone over parts of it, sometimes with great accuracy, but no traveller has ever gone along the great ancient road continuously from the one end to the other. The map is necessary for the understanding of the Roman Wars on the north side of Taurus, especially for the campaign of Servilius Isauricus in 75 B.C., and for the war in which P. Sulpicius Quirinus destroyed the power of the Homanadenses, 11-7 B.C.

This map is also used to illustrate an article on the latter war in *J.H.S.* 1917, p. 229, and may be applied to illustrate the account given of the Isaurian war conducted by Servilius Isauricus, published in *J.H.S.* 1905, pp. 163 ff.

As the map assumes and implies a reasoned system of the topography of the northern Taurus and the adjoining part of the central plateau, some brief explanation of the reasons and the authorities is practically necessary to make it useful.

The map is intended only to emphasise the main features, and makes no pretension to accuracy in representation of hill contours. I have taken the opportunity of inserting certain names which illustrate other military operations of Roman and Byzantine times, notably the crushing defeat of the great army with which Manuel Comnenus was marching to capture Iconium in 1176.

The topography of the important inscription published in *J.H.S.* 1918, p. 140, also forms a feature of the map; and a few of the villages on the Imperial estates whose population was united in the religious society bearing the name Tekmoreian Guest-friends, in the period 250-320 A.D., are inserted.

I have given the name Olympus to the great range of the Sultan Dagh, which bounds the valley of Paroreios on the south-western side. The reasons for assigning this name would require a full discussion of the topography of the region between Antioch and the Limnai. This discussion has been written, but is too long to find a place here. The topography of this little region of Pisidian Phrygia is now settled with almost unique accuracy and completeness amid the general obscurity of Anatolia. Only the Troad is better known.

A brief outline of historical discovery may be usefully appended.

The site of Antioch was fixed by Arundell on epigraphic evidence; that of Philomelion, the companion city of the pair described by Strabo, p. 577, was fixed by the same traveller from Strabo's account, which is so clear and unmistakable; but (strange to say) no mention of the name Philomelion has been found in inscriptions of the region.

Paroreios is the great valley between Sultan and Emir Dagh, Pisidian

Phrygia is the fertile region of Phrygia adjoining Pisidia, and containing Antioch, Apollonia, etc. Strabo calls it Phrygia *πρὸς Πισιδίαν*.

The site of Hadrianopolis is determined with certainty by general considerations a few miles south-west from Philomelion. The exact situation and the ruins of the city have not been discovered, but the name occurs in an inscription found by Sterrett in this neighbourhood, and the reference to it on the march of the emperor Alexius Comnenus leaves no doubt as to the approximate situation. It was in all probability the re-foundation of the ancient Thymbriion, probably on a different site not far away from the older city. Through its territory flowed the river Karmelios into the lake of the Forty Martyrs (whose more ancient name is unknown). It is certain that Thymbriion was the early city of this region. Philomelion was a Hellenistic city which overshadowed the more ancient centre of life, whereas Thymbriion lay off the line of the Great Road, closer to the foothills in front of Sultan-Dagh. In Roman time the more ancient city revived in importance and was refounded early in the second century as Hadrianopolis.

It was first suggested by G. Hirschfeld that the double lake of Hoiran and Egerdir was called in ancient times Limnai, and this 'excellent conjecture' is taken up and reinforced by various arguments in *H.G.A.M.* p. 414: see also pp. 172, 334, 389, 396 f., 407, 411. The Holy Mother of God of Limna (*Ἐπιφάνιος ὑπομνησὶς τῆς ἁγίας Θεοτόκου Λίμνας*) was present at the second Council of Nicaea, 787, could hardly be separated from the shrine on the coast of Hoiran-Gyol, where the Assumption of the Virgin is celebrated by the Greeks every year, although it is situated in a purely Turkish country, the nearest Christian settlement being at Otlu-Borlu. It is also impossible to ignore the fact that this Virgin Mother of the lake was a Christianized form of the Virgin Artemis, whose worship on the north-east coast of the lake and in the neighbouring region was so important in ancient time, as we learn from the inscriptions of the Tekmorician Guest-friends.

The situation of Myriocephalon and Musylos in the low ground between the mouth of the Aulon¹⁹ and the end of the Limnai is evident from the narrative of Nicetas, p. 232 f. and from the inscription already mentioned in *J.H.S.* 1918, p. 140 ff. The promontory of Snake's Head and the land of Ouranmia are assured from the same inscription.²⁰ The representation on the map gives no conception of the remarkable appearance of this long ridge, which extends from Olympus towards the south-west far out into the lake, forming the watershed between the Aulon and the valley of the Anthios. Its northern face towards the lake and the Aulon is a perpendicular rock, but otherwise it is a bare undulating high ground. Exploration of this ridge is urgently

¹⁹ Perhaps Musylos was the Pridlian or Phrygian word for serpent; and Musiokephalon was distorted to Myriocephalon to suit late Byzantine popular etymology. Ophioccephalon occurs in Hellenistic times.

Compare the Anatolian or Lydian name Musylos.

²⁰ Ouranmia, as given in the map, is without epigraphic authority (except the personal name Ouranmios, Ouranmios).

required. The little rock-cut chapel where the Greeks from Olu-Borlu, and even Sparta, go to celebrate the Koimesis of the Panagia every year on the 15th of August is well worth a visit. The chapel is cut in the face of the rock of Snake's Head, and is easily reached by walking along the water's edge from the little plain of Misylos. Beside it is the carved front of a sepulchre of the old Phrygian type, similar to, but much smaller and much simpler than, the splendid tombs at the Midas city. This front indicates that close to it was buried one of the chiefs of the early Phrygian people into this southern land: but long before the Phrygians came here the site was sacred and the Phrygians by the grave of their chief claimed to contribute to the sanctity of the spot. The Christians in turn gave a Christian character to the old Anatolian sanctity, connecting it with the name of St. George Limmnia who was canonised as a prominent figure in the struggle against the iconoclasts during the eighth century. The epithet marks him as being connected with the Limmni, while the brief narrative associates him with Mt. Olympus. The festival of the Assumption of the Virgin (*Koimesis*) was instituted at quite a late period; and at this spot, as we may conjecture, it was connected with the hermitage and the rude little chapel cut perhaps by the hands of George of the Limmni himself. But the spot is marked as sacred by the hand of nature or of the god by a remarkable physical phenomenon, an arched doorway of rock which stands on the edge of the water and may perhaps have been regarded as the door to the realm of the dead and to the home of the goddess, the Mother of her people, to whom they returned in death. The locality was explored by Miss Bell in 1907; visited by Anderson and me in 1912.

Out in the Limmni opposite this sacred place is situated a little island which was visited by Miss Gertrude Bell in 1907. She saw here under the water a sepulchral stele with an inscription. Later in the year this would be left uncovered as the level of the waters in Hoiran-Gyol is much lower in the autumn.

The place called by Nicetas VII. Antakes was the scene of the final stage in the crushing defeat of Manuel Comnenus. The position is evident. It lies on the right hand of the road from Antioch towards the west. The battle began in the Antou further down towards the lake, but the vanguard of the army passed on over slightly rising ground between Gazma and the VII. Antakes and remained unaware of the earlier stages of the slaughter. Karbo-Kome stood close to the lake-end, as was proved by an inscription published in *Studies in the Eastern Roman Provinces*, p. 309. The lists of Tokmurelian Guest-friends prove that the same individual was sometimes spoken of as Karbokometes; and sometimes as Marsianos (*Studies*, p. 351). This implies that Karbokome and Marmia were in close relation to one another, one perhaps a village and the other a farm close to the village.²¹

²¹ Compare the case of Basil and his brothers who were spoken of sometimes as natives of Naamure (Nentel), sometimes as

belonging to Karbala or Rapkala, the family estate (now called Gölveren, a large Christian village).

Marsia was placed conjecturally half-way between Antioch and Apollonia in *J.H.S.* 1883, p. 33.²² The proof of this conjecture was discovered only twenty-two years later (see *Studies in the Eastern Roman Provinces*, pp. 355, 367) in the inscription of Karbokome.

On Dao-Kome, presumably Wolf-Village (*daos Hes.*), see *Studies*, p. 364.

The site of Anaboura was recognised by Sterrett in 1885. On the site of Neapolis, see *Atk. Mitt.* 1885. It was the new city which grew up on the line of the Great Road, whereas Anaboura lies about six miles away from the road in a secluded position. If Neapolis had been founded by a Roman emperor it would probably have borne a Roman name, but it developed with the road and really is a sort of extension of the people of Anaboura to keep themselves in communication with the world. Pliny is the oldest authority that mentions Neapolis: Strabo, quoting Artemidorus, whom he follows in respect of this region wholly unknown to him personally, mentions Anaboura. The comparative importance of the two changed between 100 B.C. and 79 A.D.; Pliny, however, used the lists compiled for Agrippa, and perhaps 12 B.C. should be taken instead of 79 A.D.

The modern market town Kirili probably preserves a reminiscence of the old name of the lake Karilis, adapted to Turkish pronunciation and language. There was undoubtedly here, or in the immediate neighbourhood, a village of some importance and a station on the road. A large milestone in the cemetery belongs to a very early period, but the inscription has been obliterated by weather, which the stone could not resist. It seemed to me to be probably one of the Augustan *milliarie* on the Via Sebaste. That way forced further north, evidently at the southern end of the extremely easy and level pass (Aulon?) which crosses the watershed south of Kara-Aghatch, probably near a site which bears the name Monastir, a reminiscence of its ancient importance. A Roman bridge (probably Augustan) over a stream which runs only in the rainy season, and which was dry when we saw it in 1901, belongs probably to the age of Augustus, and proves the line of the other branch of the Via Sebaste not far from a village called Genümez.²³

The situation of Tymbris was fixed by Sterrett on the upper Eury-medon, as placed on the map (see *H.G.A.M.* p. 406, No. 27). There was, however, no definite evidence, only general probability. Some miles to the east in the same valley Sarre (*A. E. Mitt.* 1896, B. 6, p. 52) found an inscription mentioning the *ἔργον Ἰουαδίων*. I suggested in the *Oest. Jahresh.* 1898 (Beiblatt, p. 95), that *Ἰουαδίων* had been misread and that the initial letter was T; also that, by error of the stonemason in this rude inscription, the middle syllable BPI had been omitted, being possibly added on the side of the stone and left unnoticed by the copyist. The first part of this conjecture was confirmed in the same Journal in an appended

²² Marsia, according to this conjecture, would be on the lake north shore between the way-side Khan at the N.E. end of the lake (Karbokome) and Genj-Ali at the N.W.

of the lake (Höran-Göl).

²³ On the bridge see Cressa in *J.H.S.* 1902.

note by Kalinka. The stone reads *Tynadéon*. There remains, however, the uncertainty whether this implies a fortified village named Tynada, or is an error for Tyn(bri)ada. The site apparently was Sivri-Kalesi, which is situated near the village Terziler.

The situation of Malos at Malek-Kalesi was suggested in *B.S.A.* 1902, p. 259. The survival of the name seems to afford satisfactory proof, and it is precisely in this region that Malos ought to be found. It was the *Μαλὸς πρὸς Χομία Σακκάρ* of the Tokimorian lists (stated as probable in *J.H.S.* 1912, p. 169, where the meaning of the name Khomia is discussed); there are rare coins of Malos.

Adada was recognised as Kara-Bavlo by G. Hirschfeld on the evidence of an inscription of Sterrett's, which the latter strangely regarded as a proof that Adada was situated at a different site (*H.G.A.M.* p. 408, No. 32). Zorziā was perhaps situated in the middle of the Eurymedon valley, where some city and bishopric is to be expected: the inscriptions about Kiesenie and Kassimler might belong to it or to one of the villages that constituted the township.

Tityassos, the last name in the Pisidian list of Hierocles, is placed in *B.S.A.* 1902, p. 259, but evidence is lacking.

These four bishoprics, given at the end of Hierocles's list of Pisidia, necessarily lie along the southern frontier of that province in the Byzantine time, and as the situation of the first two is comparatively certain, the position of the third and fourth are likely to be not far from the sites stated on the map. They were probably not *πόλεις*, but groups of villages after the Anatolian system.

The sites of Vasada and Amblada were detected from inscriptions found by the Austrian Expedition of 1902, and the explorers suggested that the site of Mithia was at Fassiller. In *B.S.A.* 1902, this suggestion is accepted and reinforced by the observation that 'the strong castle of Mithia' is that powerful Byzantine fortress (almost entirely destroyed and hardly visible, except with a glass, from the plain of the Aulon), which is situated on a high, bold hill two miles west by north from Fassiller, overlooking the valley of the Aulon and commanding the passages east towards Konia and south through the valley. Further, it was there pointed out¹¹ that Mithia and Vasada were adjoining bishoprics, as proved by an incident described in a Letter addressed by Basil to Amphilochos.

The site of Colonia Parlais is fixed on general considerations in *B.S.A.* 1902-3, p. 261, reinforced by a Latin inscription. In a Roman military road system the crossing of the river where it issues from Lake Karalia was a point of the utmost importance, and as one crosses the modern bridge one notices the remains of a bridge of fine old Roman work under the water, close to the modern bridge. Various milestones have been found by Sterrett at points in the valley of the Aulon near Gorgorome and Amblada, implying that a Roman road went down the valley of the Aulon.

¹¹ *B.S.A.* *loc. cit.*

The further course of this Roman road is not as yet proved by any epigraphic discovery. There is a modern bridge over the arm of the lake which extends up into the Aulen, a little way west of Balyklav, ²⁰ a village which lies high on the hill above the glen of the Aulen; and local tradition says that this modern bridge in its marshy situation overlies an older bridge.

Further, a Roman inscription has been found at Ayran by Hamilton, in honour of the governor of Galatia, Annius Afrinus, in the time of Claudius. According to the view which I have gradually formed on the probabilities of the evidence generally, such inscriptions were usually erected in commemoration of an actual visit made by the governor to the place; and a visit of Annius to this southern coast, and probably to a point of historical or religious importance on the southern shore is to be assumed accordingly. This progress of the governor through rather remote parts of southern Galatia must be connected with a very considerable re-organisation of the southern part of the province and of the Taurus frontier generally, which has left its impression in such titles as Claud-Iconium, Claudio-Derbe, Claudio-Selenceia. These titles imply a general recognition in the imperial policy of the definite improvement in the Roman standard of loyalty and peace and order along the Taurus frontier of the province Galatia; they mark the cities as loyal to the imperial government and helpful in carrying out its policy. Later, about 130, Iconium was elevated to the higher rank of a colonia.

The sites of the Lycæonian bishopric Homanada and of the Pamphylian bishopric Romanada were discussed in *J.H.S.* 1917, while the remarkable situation of Arvnu, in comparison with the character of many other great Anatolian sanctuaries, suggests that here is to be found the old hieratic centre Homanu or Romanu.

The Orontian mountain region, hilly towards the south, mountainous towards the north, but containing even in the south the great peak of Elenkilit, is proved by the authority of Ptolemy, who places among the Orontenis the towns of Mithia and Pappa. The site of Pappa was proved conclusively by inscriptions discovered there in 1901 and published by Cronin in *J.H.S.* 1902. The territory of the Orontenis, however, extended much further north, for an inscription dedicated to Zeus Orontenis ²¹ has been found on the railway at the village Serai-Inn, four or five miles north-north-west from Ladik and about one mile or more north of the railway line and station of the same name. The site of Zizyma or Zizima is proved in *Classical Review*, 1905. It was the seat of the Zizimene Mother, whose influence is marked by numerous inscriptions found at Iconium, Ladik, and other places on the north and east of the Orontian mountains. Very extensive mines of cinnabar (red ore of mercury), and perhaps copper, were worked at Zizima, and constitute the gift of the mother to her subjects and

²⁰ This *v* is silent in popular pronunciation.

²¹ It may have been carried from Saima in a glen of the Orontian mountains; but more probably belongs to the Ladik plain, and

indicates that the god of the mountains was revered also in the valley. See *J.H.S.* 1918.

children. The cinnabar has been worked in recent years, but the mines were found to be already pretty nearly exhausted by the great ancient workings. According to my friend Mr. Edwin Whittall there were also copper mines worked in this neighbourhood.

The village of Midan may be regarded as showing the survival of an ancient name, the second element in which was Gdan, the Phrygian word corresponding to the Greek *χθον* earth, land. It would be out of place to speculate here about the formation of this name, which is dependent upon an unpublished inscription.

Tyriaion. This site is ordinarily identified with the modern village Ilghin beside the railway station, and was certainly not very far from Ilghin: but Ilghin probably preserves in modern form the old village named Algounia, and Tyriaion is rather to be looked for at a different point in the same region. There is a remarkably ancient fortification in the narrow pass east of Ilghin, through which run the railroad and the river. This fortress lies on the hill and is in full view from the railway. It is not in itself the site of Tyriaion, but is probably an outlying fortification to defend the territory of that city. Between this narrow pass and the village of Kadin-Khan (three miles south of the railway station of the same name), not far from a Yaila called Keuli-Tohr, is a Hittite inscription on a great embankment, formed apparently to dam up the water that runs down from the Orontian mountains towards the plain and to conserve the rains of the spring for the benefit of the agriculture during the following season.

The line of the western *Via Sebaste* is doubtful. Roman milestones occur at intervals along the road which skirts the north edge of Hoiran lake: one milliarium marked XI stands in the cemetery below Ganzaa, the modern Gondane; two others are in the cemetery at Genj-Ali, at the north-western end of Hoiran lake. Others occur in the valley of Ofu-Borin, and in the pass to Aurokna. This line, however, seems rather unsuitable for the purpose of guarding the Taurus frontier. The main purpose, however, of the *Via Sebaste* in this direction probably was to afford the most rapid connection with the three Pisidian colonies, Kremna, Komana and Olbasa. The only milestone bearing the name of the road stands on the site of colonia Komana and bears the number CXXVI, which is evidently measured from Antioch. I have also indicated a conjectural line of road down the Anthios valley passing between the mountains and the lake at Demir-Kapu, 'the iron gate,' and round the southern edge of the Iamnai.²² This line is not marked by any milestone as yet discovered, but it would form the most natural and useful route between Antioch and the cities of the Pisidian frontier such as Prostanna, Paris, etc., ending in the three colonies, which it would reach by three separate forks. The site of Prostanna is merely conjectural (see *H.G.A.M.* p. 407). The earliest reference to Prostanna is

²² Demir-Kapu is described by Steuert as difficult, till a new road was made by blasting the rock. He mentions no traces of an ancient road, but possibly rock-cutting (an-

cient) might be distinguished from marks of blasting (as along the Cilician Gates route), if carefully examined.

found in an inscription of Delos recording that the Demos ὁ Προστρατευέων honoured M. Antonius quaestor pro praetore, B.C. 104 (see *R.C.H.* 1892, p. 155).²⁰ It is possible that this older form of the name is to be interpreted πρὸς Τάσσεα and to be perhaps identified with Tenia of the Tekmurestan lists. Tenia is doubtless the Atenia of the Notitiae, and the name in Hierocles, Atmenia, is in all probability an erroneous spelling.

The *Via Sebaste* which connected the military centre Colonia Caesarea with the Colonia Julia Lustra is marked by one of Augustus's original milestones at Pappa and a group at Selki. It is probable that the road between Selki and Pappa went more directly than is indicated in the map. I have marked the road to Iconium as forking from the *Via Sebaste* and going south of Lornas-Dagh. The modern road passes through Kizil-Euren and north of Lornas-Dagh: this northern route is shorter, but the ascent from the east by a very steep and rough path to the watershed east of Kizil-Euren was a mere horse track until comparatively recent time, when Ferid Pasha, the *vâlî* of Konia, made a passable road at considerable expense; but the mediaeval road, which was the waggon road from Iconium to the west, followed the Augustan route indicated on the map and was kept in passable order for wheels until about sixty years ago. I was assured by an excellent authority from whom I hired horses and waggons year after year that in his youth this carriage road was used regularly, but it had been allowed to fall into decay in the growing desolation of Iconium. I well remember riding into Konia on my second visit in 1886, coming from the west, and thinking as we rode through the streets that we were entering a city of the dead, such as is described in the Arabian Nights and such as was the character of Kherson in the early Middle Ages. The revival of Iconium was due to its position on the railway.

There was a fork from the *Via Sebaste* to Iconium, as is mentioned in the opening of the Acts of Paul and Thekla. It was here that Onesiphoros came from Iconium and waited for the Apostle, who (as Onesiphoros had been warned in a dream) was going to pass along the Imperial road to Lystra. Onesiphoros, seeing Paul on the road to Lystra, induced him to turn aside to Iconium.

The exact line east of Pappa has never been determined or followed, but the geographical character shows what must have been its course through a long narrow pass on the stream. Then there are only two alternatives: either on the one hand it followed the natural shorter course down the stream which rises about three miles above Simiandos on the watershed and flows down by Bulumia to Lystra, or it went further east towards Iconium and then after reaching the plain would have to cross the steep ridge (500 ft.) between Konia plain and Lystra, which gives a longer and more difficult route. The purpose of *Via Sebaste* was to reach Colonia Lustra, and this purpose is fulfilled best by the route through Bulumia.

In passing a suggestion may be thrown out with regard to the origin of

²⁰ The name Antonius is restored by M. Doublet.

the name *Lustra* or *Lystra*. The modern name of the deserted site is *Zoldara* or *Zeldra*. This is clearly an ancient name, and not a modern Turkish invention. If the old Lycæonian name was *Sultra*, the Roman metathesis *Lustra* would be a change not unnatural owing to the common popular desire for a name which conveyed a meaning in Latin, while the real old Lycæonian word remains in modern usage with slight alteration to the present day. The modern village *Khatyn-Serai*, the lady's mansion, lies between the junction of the two streams, about two miles south-east from the ancient site.

No conclusive proof of a *Via Sebaste* connecting *Colonia Parlais* with *Colonia Caesarea* has been discovered, except the probable Augustan bridge over the river at the ancient site, which has been already mentioned; but if there was a *Colonia Augusta Parlais* there must have been a *Via Sebaste* connecting it with the military centre; and the rather confused evidence of the *Peutinger Table* and the *Anon. Ravennas* shows that there was a road from *Antioch*, going on to *Isaura* and continued through southern Lycæonia across the Cilician Gates to *Mopsos-Krene*. Milestones of uncertain or post-Augustan date occur in considerable numbers on the route.

III.—THE IMPRISONMENT AND ESCAPE OF DOKIMOS (Diod. xix. 16).

The problem of the topography of the Anatolian campaigns in the time of the successors of Alexander the Great is a difficult one. Information is scanty, the names often differ from those which were used in the Roman period, sometimes the names are not even mentioned. Moreover much harm has been done by certain identifications which have been accepted by scholars in general, but which are incorrect; and these false identifications have misled subsequent historical scholars into mistake with regard to the situation of other places.

The basis of all study must be a proper conception of the great lines of road leading east and west across the peninsula, and the right way of using these for purposes of war or communication or commerce; but some of the accepted identifications are opposed to the very nature and history of the road system. This is, *e.g.*, the case with the battle in which Antigonos defeated an army led by Alketas and other generals, or rather forced them to surrender without a battle in the Pisidian Aulon, 320 B.C. The scene of this battle is placed by all recent historians, following Schoenborn, at the head of the narrow and steep ascent²² called 'the ladder' from the sea plain of Pamphylia to the plateau east of Ariassos and south of Kremna. I shall not here discuss the details of the battle, which are wholly inconsistent with that locality, while they suit admirably the Aulon, twelve miles west of Pisidian Antioch. It need only be pointed out that the accepted situation for this battle makes Antigonos march from a fortress somewhere in the

²² It may fairly be described as a winding 1882, leading my horse to ascend it on rock-staircase, a Kiliman. I walked up it in horseback is difficult.

centre of Cappadocia to this remote point, which is far removed from any road leading east and west, in seven days. The mere measurement on the map shows how utterly impossible it was to march such a distance within that time. Names are given by neither of the principal authorities, Diodorus and Polyænus²⁰ except that the encounter took place in the Pisidicæan Aulon where the western army was encamped and where they were surprised by the rapid advance of the king. It was a marvellous achievement to be able to reach this Aulon in the time described, but to add to the march a further 100 miles leads into the region of the impossible. Diodorus does indeed mention the name Kretopolis, the situation of which has been inferred largely from the mistaken idea with regard to this battle, and I have in *C. B. Phry.* i. p. 325, accepted this reasoning. I now venture only to suggest a theory with regard to the operations in central Phrygia which resulted from the victory of Antigonos.

Diodorus (xix. 18) gives an interesting account of the imprisonment of a group of generals, Attalos, Polemon, Dokimos, Antipatros and Philotas, who were taken prisoner when the army of Alketas was surprised and forced to surrender in the Pisidicæan Aulon, 320 B.C. They were shut up under guard in a certain fortress of surpassing strength, which Diodorus omits to name. Such trifles as localities in Anatolia were beneath the dignity of his historical style. We might infer from the circumstances the probability that the fortress was not very remote from the scene of their capture. This is confirmed by the fact that, in their captivity, they heard that Antigonos with his army was marching to the upper Satrapias: under this phrase²¹ there can be no doubt that the provinces in the east of Anatolia were mentioned. They were therefore in a fortress somewhere in the western or central part of Anatolia, and Antigonos after that hasty march and great victory returned immediately to prosecute the war against Eumenes in Cappadocia and the eastern parts of Anatolia. The captives, who were eight in number, succeeded in corrupting their guards; and, being men of unusual courage and skill in the use of weapons (as was natural from their campaigns in company with Alexander), they seized the commander of the fortress and threw him over the wall of the rock, which was a stadium in height. This detail aids further in identifying the locality. It may be accepted. Now there are few fortresses which stand on a rock a stadium high, over which a man can be thrown to the ground. Two places only in those districts occur to me as fulfilling the condition. One is the site of the modern Oluborlu, the Byzantine Sozopolis, near the Hellenistic Apollonia; but the form of the fortress is not suitable. It is a great fortress on a huge scale, consisting of two hills, one higher and one lower, with a marked depression between them; but the site is too large for the incident described by Diodorus. The captives who succeeded in setting themselves free were only eight in number, and with some friends who had joined them from outside,

²⁰ Diodorus indeed mentions Kretopolis, but this probably rests on a confusion between the battle and the flight of Alketas. The site

of Kretopolis is uncertain.

²¹ Compare Acts xiv. 1, *ἡ ἄνω γαλιλία*.

expecting something of the kind, the total number was about fifty. Fifty men could not possibly garrison or hold Olu-Borlu. A more confined and narrow fortress must be looked for. As I read the description of the incident by Diodorus, it was not Olu-Borlu that came into my mind, but the great rock of Afom-Kara-Hissar, three miles N.W. from Prynnessos. This is a natural fortress, in height somewhere about 500-600 feet, confined and narrow and with almost precipitous sides, where fifty men could hold out against an army. They were besieged here by about 3,000 of the adherents of Antigonus, but it would take a larger number than 3,000 to surround Olu-Borlu, while this number could perfectly well blockade and completely cut off the rock of Kara-Hissar.

One of the captives, Dokimos, resolved to take advantage of a means of descent which he observed to be unguarded, and to go on an embassy to Stratonika, the wife of Antigonus, who was not far distant from the spot (presumably in Kelainai, which was favoured by Antigonus as a residence). At the present day it is understood that there is only one way of climbing the rock of Kara-Hissar, a zigzag path which leads up to the mediæval castle on the summit; but it would be difficult to find anywhere a rock which does not offer more than one way of descent to an active, skilful, and desperate man, like Dokimos. This descent was left unguarded by the besiegers, which implies that it was not known to them or that they looked upon it as impossible and were careless about watching it, concentrating their attention on another way (probably at a totally different part of the rock, where the regular descent and ascent was situated). All this suits Kara-Hissar admirably.

Now we come to one detail as to which I cannot speak so confidently. Dokimos in his descent was accompanied by one man, who probably acted as a guide, because he went first, while Dokimos came after him. When they reached the bottom of the cliff Dokimos hurried away and escaped for the moment, but was caught later and thrown into prison. His companion joined the enemy, being perhaps captured by them or else seduced by the hope of reward, and he led up by the same difficult path a considerable body of the besiegers and succeeded in seizing one of the upright rocks. This implies that the summit was not a single point, but contained at least two separate peaks. I have not myself climbed the rock of Kara-Hissar, having always shrunk from the toil and fatigue involved in the ascent, which is extremely steep; moreover, I was assured by Sir Charles Wilson, who ascended to the castle, that it was mediæval and showed no trace of ancient fortification. I have, however, never known any rock which in its natural state does not consist of more than one peak or point at the summit, and I conjecture that this was the case with Kara-Hissar (which in the Byzantine time was called Akroenos, and also Nikopolis because it was the scene of the great victory gained in 739 over the Arab army commanded by Seïd-el-Batal-el-Ghazi, the first great victory which cheered the reviving Byzantine Empire to stem the tide of Arab conquest).

One other consideration is equally applicable to both places. The

knowledge gained by the captives of the plans and the departure of Antigonos implies that they were probably kept in a fortress near or on one of the great lines of communication running east and west. That suits Olu-Borlu excellently. It also suits Kara-Hissar excellently, for the latter lies at the west entrance on the plain and roadway of Phrygia Paroreios, on one of the greatest lines of communication. Olu-Borlu has the advantage in one respect that it is closer to the place where Alketas was defeated, viz. the Aulen leading up towards the east from the northern coast of the Limnai; but it is much easier to understand how eight captives on the Kara-Hissar rock could learn what was taking place, and (in the slipshod eastern method of imprisonment) were able to concert a sudden attack on the garrison of the summit, which could not be large. On the contrary, eight men could not contend with the necessarily large garrison of Olu-Borlu, but if they had weapons and were personally so skilful in the use of them as Diodorus describes, there is no impossibility in their being able to overpower by a sudden attack the small number of men who would be in garrison on the summit of Kara-Hissar.

While I cannot speak from personal knowledge about the summit of the rock of Kara-Hissar it is easy to say with definite certainty that the description given by Diodorus as a whole does not suggest Olu-Borlu and is applicable only in a very rough fashion to that great and large fortress. A difficulty there would also lie in the one unknown and unguarded descent, because it is practicable and even easy to descend from Olu-Borlu almost everywhere except at one great precipice.

As a coincidence I would add that I asked Professor A. W. Mair of Edinburgh to read the passage and form his own conclusions as to the situation described. He sent me a letter with a sketch of the shape that he imagined for the fortress, judging of course only from the words of Diodorus with no other evidence or authority; and the sketch which he drew corresponds most remarkably with the aspect of the rock of Kara-Hissar, with the winding path leading to the top. Any person who has travelled a great deal throughout Anatolia and observed the many fortresses of all periods would at once recognise this sketch as being the rock of Akroenos. It is a remarkable fact in regard to the numberless rocks which protrude through the level plateau, sometimes as lofty mountains, sometimes as little peaks, that every one has its distinctive features and character and is easily recognizable on the journey at a great distance, or in a photograph, or even in a drawing.

Diodorus does not mention the name of this fortress, but his description suggests that it was (as we have assumed throughout) pre-eminent as a stronghold; i.e. it is *Λεοντοκέφαλον*, spoken of by Appian, *Mithr.* 19, as *Φρυγίας ὀχυρώτατον χωρίον*.²² It was pointed out by G. Hirschfeld, *Berl. Phil. Week.*, 1891, p. 1386 f., that Leontokephalon must be the great rock of Afion-Kara-Hissar; he was followed by Radet in his book *En Phrygie*, 1895,

²² Plutarch, *Them.* 30, has the form *Λεόντιον κεφάλαιον*. This place is omitted from *H.G.A.M.*

p. 45); and the phrase used by Appian seems conclusive to one who looks at Phrygia with forty years' experience.

Radet, *loc. cit.*, p. 123, discusses also the position of the hot springs at Leontos-Kome in Phrygia (*H.G.A.M.*, p. 143). There are two hot springs in the great plain of Afion-Kara-Hissar, which geographers generally call Caystropedion. One is situated near the N.W. angle, and one towards the S.E. of the plain (towards Yem-kem). They are the only two important hot springs in the large valley, and I left the choice open between the two. Radet is not satisfied with either situation, but places Leontos-Kome at a village called Kara-Arslan (Black Lion). Here, as he says, Tchihatcheff mentions hot springs, and he argues that the name 'Black Lion,' which is used by the modern Turk, is merely a translation of the Greek Leontos-Kome. We visited Kara-Arslan in 1884. There are no hot springs there: Tchihatcheff spoke of the springs towards Yem-kem, and his meaning is clear. Kara-Arslan is a *Tchiftlik*, or estate, the property of the noble family in which the headship of the Mevlevi dervishes is hereditary. Similarly, close to Konia, on S.S.E., there is a large estate called Kara-Arslan, which also is the property of the Mevlevi. The modern name has no relation to ancient facts, but means the Black or Dread Lion²² of the Seljuks. The Mevlevi dervishes go back to the old Seljuk Sultanate of Konia (Rûm).²³

Kara-Arslan, therefore, gives no evidence about the hot springs of Leontos-Kome²⁴; but perhaps an analysis of the water of the two above-mentioned springs would give certainty (*H.G.A.M.*, *loc. cit.*); for Athenæus describes the water of Leontos-Kome as having a marked chemical character. Both the two hot springs of the great valley are in frequent use at the present day as curative baths. Personally, I should identify Leontos-Kome with the springs in the N.W. of the valley. It was not possible for me to enter the bath-house (which seemed to have some interesting features) because it chanced that our visit coincided with a day when the baths are entirely given up to women visitors. Lady Ramsay was, however, allowed to go into the building and to make a copy of an inscription inside the bath chamber.

Radet's view is justified that modern Turkish names are sometimes the translation of the ancient Greek or Phrygian names, but this example shows that he is disposed to carry the principle too far. He is also right in holding that the Turkish name of many places is merely an attempt to pronounce the

²² The word *Kara* has often a moral signification: the strongest man in a village is often called *Kara Mustafa*, *Kara Ahmed*, or so on.

²³ The ruling Mevlevi family is conceived to be a representative of the Seljuk Saltans; the chief of the Mevlevi (entitled *Tchelsch Eflendî*), whose palace is at Konia, gives the sword on the Osmanli Sultan; and the theory is that the Osmanli Sultans are not completely invested with the power of the Sultanate until the sword has been girded on by

the *Tchelsch*. This ceremony was performed (being revived after a lapse) in 1909 for the benefit of Mehmet V., when the intention was to mark by every old ceremony the completeness of the authority conferred on him at the investiture while his predecessor Abdul Hamid was still alive.

²⁴ They are about six miles or more from Kara-Arslan, and lie on the direct road Kara-Hissar to Tohat. Kara-Arslan is on the road to Synnada (as Radet rightly says).

old Phrygian or Greek name; but (as in the other case) he sometimes carries the principle too far. *E.g.*, on the preceding page of his *En Phrygiæ* he identifies Ghienkiljeler with the late Byzantine bishopric Gajoncome on account of the similarity in sound. Names of the type of Geukcheler are so common in Anatolia as to deprive this not very striking similarity of any real force: Geuk in the peasants' speech means blue; Geukche means bluish; and Geukcheler is the same word with the plural termination "ler" tacked on. No stress can be laid on such slight similarities as this.

It is probable that a village mentioned by Leo Diaconus, Cedrenus, Symeon Magister and Leo Grammaticus in various forms, Ὠλέοντα or in rustic speech Γαλέοντα, Γαλέοντες, Γαλέοντι,²⁶ is to be identified with the Greek Leonatos-Kome, the Phrygian and the Greek form of the name. The Phrygian word indicating town or village or settlement was 'oua.' 'Oua' is probably nearer to the Anatolian word, which is perhaps older than the Phrygian conquest. It seems not impossible that the term 'oba' used by the Turkmen and other nomads on the great central plains is the old Anatolian term. Leo Diaconus refers to the difficulty of catching the right pronunciation of this name, and the use of 'g' in Greek pronunciation and spelling was one of the many devices for representing the Anatolian 'w' in Greek.

W. M. RAMSAY.

²⁶ *H. O. A. M.* p. 143 f. In the usual Byzantine fashion this name was interpreted as an

omen of the disaster that Leon Phokas experienced here (220 A.D., 740 A.D.).

THE SUBJECT OF THE LUDOVISI AND BOSTON RELIEFS

[PLATE V.]

AN unsolved problem has a peculiar fascination in archaeology as elsewhere. It compels our interest, and we come back to it again and again to try and find a solution. The Ludovisi and Boston Reliefs have presented us with many such puzzles and have consequently been the subject of much discussion. The two most important publications of these monuments—Studniczka's in the *Jahrbuch des deutschen archaologischen Instituts*, 1911, pp. 50-192, and Caskey's in the *American Journal of Archaeology*, 1918, pp. 101 ff.—have dealt at length with the numerous points involved and many of these have now been satisfactorily solved. The identification of the subjects represented on the reliefs, however, especially of those in Boston, is still only tentative. As Mr. Caskey says, "none of the numerous attempts to interpret the reliefs has met with unqualified acceptance." To the many explanations which have been advanced I am going to add still another, which to me at least seems the simplest, the most natural, and for that reason the most probable.

Let us review briefly the situation as it stands at present and the general conclusions at which we have arrived. With almost complete unanimity the monuments are now assigned to the period transitional between the archaic and the fully developed—the time of Polygnotos and the Olympia pediments. The purpose of the reliefs is not quite certain. The similarity of their form and style suggests that they were either pendants or parts of the same monument, and that they must therefore be interpreted in relation to each other. The most probable theory, and the one which has found most adherents, is that they were screens of an altar.¹ With regard to the subjects represented, the central portion of the Ludovisi relief is now fairly generally accepted as representing the goddess Aphrodite rising out of the sea with two attendant Horai—a beautiful translation in plastic form of the well-known passage in the Homeric hymn to Aphrodite (VI. 3-6):

... ἔθι μιν Ζεφύρον μένος ἰγρὸν ἀέντοις
ῥέεικεν κατὰ κύμα πολυφλοίσβοιο θαλάσσης
ἄφρο' ἐν μαλακῇ· τῇ δὲ χροσαίπυκος Ἴδραι
δέξαντ' ἀσπασίως, πέρι δ' ἄμβροτα εἴματα ἔσσαν·

¹ Plate V. is reproduced from Studniczka's larger plate in *Jahrbuch* cxxi. (1911), Taf. I. Photographs of still larger scale were pub-

lished by E. A. Gardner in *J.H.S.* xxviii. (1913), Pl. III-VI.

² Cf. Caskey, *op. cit.* p. 101 ff.

'There (in Cyprus) the moist breath of the western wind wafted her over the waves of the loud-moaning sea in soft foam, and there the gold-filled Hours welcomed her joyously and clothed her with heavenly garments' (tr. Evelyn-White). Though we have no strict parallel in contemporary art, we know that the subject (sometimes treated rather differently, however) was used on important monuments, such as on the pedestal of the statue of Zeus at Olympia by Phidias.² The other interpretations suggested—Pandora, Kore or Ge rising out of the earth, a fountain nymph rising from the sea, a woman in childbirth—have never had a large following and have now been practically abandoned.³

The subject of the Boston companion piece has proved more difficult. The central figure on the middle portion is clearly Eros, and he is weighing diminutive figures of men before two women; where the scale is heavy the woman is joyful, where it is light she is in distress. So much is clear; but who are the actors in the drama? Are they mythological figures or human beings? The chief interpretations so far given are (1) The Psychastasia, or weighing of the souls of heroes, either Achilles and Hektor or Achilles and Memnon,⁴ (2) Eros, the great primeval divinity, weighing out to two wives the assurance of lineage, (3) The settlement of the dispute between Aphrodite and Persephone for Adonis. Of these the last, first advanced by Studniczka,⁵ has become the most favoured. Caskey calls it 'the only acceptable interpretation of the scene yet proposed.' But though acceptable it has not been unreservedly accepted; for it has failed to be convincing. There are moreover, certain considerations which appear to me to speak definitely against it. We have no conclusive evidence that the myth of the dispute between Persephone and Aphrodite for Adonis is earlier than the fourth century B.C. In literature our chief source is Apollodorus (early Imperial period) in his *Bibliotheca*, III, 14, 4, who relates it as follows: 'While he (Adonis) was still an infant, Aphrodite, without the knowledge of the gods, took him because of his beauty, and hiding him in a chest, gave him into the charge of Persephone; but when Persephone saw him she would not give him back. A trial was held in the presence of Zeus; and by his decision the year was divided into different parts, during one of which Adonis might be by himself, in the second with Persephone, and the third with Aphrodite. But Adonis gave Aphrodite his own share also. Later, while hunting, he was wounded by a boar and died.'⁶ Some commentators think that Apollodorus derived this myth from Panyasis (early fifth century, B.C.); but Apollodorus quotes Panyasis as an authority only for the theory that Adonis was the son of Theias and Smyrna as against Hesiod's testimony that he was the son of Phoenix and Alpheisboia. To attribute his whole subsequent

² Cf. Pausanias's *Description of Greece*, v. 11, 8: 'and after Hestia there is Love, receiving Aphrodite as she rises from the sea and Perseus as he is crowning Aphrodite' (tr. Frazer).

³ Cf. the discussion of these theories in Studniczka, *op. cit.* pp. 101 ff.

⁴ For a discussion of these various theories cf. Studniczka's and Caskey's publications referred to above.

⁵ Cf. *op. cit.* pp. 141 ff.

⁶ Cf. also Hyginus, *Astronomica*, II, 7.

story to Panyasis is quite arbitrary; Studniczka himself regarded such a source as 'at least uncertain' while Dümmler in Pauly-Wissowa's *Realencyclopädie*, Adonis, p. 333, thinks the myth can certainly not be earlier than the fourth century B.C.⁸ At all events, none of the earlier writers have any allusion to this myth. In sixth and fifth-century literature⁹ Adonis figures as the favorite of Aphrodite, who was killed by a wild boar while hunting, but who, to assuage the grief of Aphrodite,¹⁰ was allowed to spend half of the year with her on earth, while the other half he spent in the lower regions with Persephone. The legend was said to have been derived from the East and appears to be symbolical of the death of nature in winter and its revival in spring. Hence Adonis's death and his return to life were celebrated in annual festivals. It is easy to see how in later times this original legend would be altered to Apollodorus's version with its more personal and anecdotal elements. That the incident of the death of Adonis while bear hunting was retained in spite of the contradiction it involved is characteristic of such later perversions.

When we pass from literature to art, we find that the subject of the dispute of Persephone and Aphrodite for Adonis likewise does not appear on sixth and fifth century monuments. The only monuments which can be interpreted as referring to it are a Praeneste mirror¹¹ and one, possibly two, Apulian vases.¹²

But even if we suppose that the story was known at the time that the Boston reliefs were made, that is, about 460 B.C., and that by accident we have lost both literary allusions and contemporary artistic representations, even so it would be difficult, to my mind to read the Adonis legend into the Boston relief. Zeus is the arbiter of the dispute. He appears as such on the Praeneste mirror and the Apulian vases.¹³ And if not Zeus we expect to find an accredited representative in his place. Thus, though Homer speaks of Zeus weighing the souls of Achilles and Hektor on golden scales¹⁴ and in the *Psychostasia* of Aeschylus we hear of Zeus weighing the souls of Achilles and Memnon,¹⁵ in vase paintings representing this subject it is Hermes who holds the balance—Hermes, the messenger of the gods, sent by Zeus on all manner of missions¹⁶ and also the conductor of souls to the lower regions.¹⁷ And in

⁸ Cf. *op. cit.* p. 141: 'weshalb den ganzen Bericht auf diesen Epiker zurückzuführen mindestens unsicher ist.'

⁹ 'Sie (diese Sage) ist nicht echte Mysterien-erzählung . . . sondern spätes Dichtungs. Bei Panyasis stand sie jedenfalls nicht; allem Anschein nach ist es die Lösung welche ein Deus ex machina (Zeus, Aphrodite, Kallipos) einem Drama das sich vornehmlich mit dem Schicksal des Kinyras und der Myrrha beschäftigte, gab, also nicht älter als das 4. Jahrhundert.'

¹⁰ Cf. Sappho 62 (128), Aristophanes, *Lysistrata*, 387 ff.; Praxilla, Bergk I.

¹¹ This grief is vividly described by Blon-

(third century B.C.) in his idyll, *The Lament for Adonis*, *Idylls*, I.

¹² Cf. *Monumenti dell' Instituto*, vi, 24, 1, and Gerhard, *Rev. Spangl*, iv, 325.

¹³ Cf. *Bullettino archeologico apuliano*, n.s. vii, 9, and perhaps *Mon. d. Inst.* vi, 1860, Pl. 42 a (now in the Metropolitan Museum of Art, New York, No. 11, 210.3; see *Museum Bulletin*, May 1912, pp. 95-96, Fig. 2).

¹⁴ See references quoted above.

¹⁵ *Ibid.* xii, 209-213.

¹⁶ *Frags.* 278 (from Pind., *Moralia*, II, 2).

¹⁷ Cf. e.g. Homer, *Odyssey*, I, 35 ff. and I, 83 ff.

¹⁸ Cf. e.g. Homer, *Odyssey*, xviii, 1.

a different version of the Adonis dispute (Hyginus, *Astronomica*, II, 7) Zeus appoints Calliope, the mother of Orpheus, to act as arbiter between the goddesses. But who is Eros? He is no representative of Zeus but the child and follower of Aphrodite. As such, at least, he appears regularly in post-Homeric literature²⁸ and in art.²⁹ How could he then have been chosen an impartial judge to decide a dispute between his mother and Persephone? Persephone would never have consented to such a partisan transaction, and no Greek would have thought it fair.

The difficulties do not end here. Studniczka himself³⁰ points out that it may appear strange that the figure of Adonis on the weights of the scales is that of a full grown youth instead of a child, as the story relates. On the Praeneste mirror and on one of the Apulian vases³¹ Adonis appears as a child, either inside a small chest or standing beside Zeus. When Studniczka appeals to the testimony of ancient authors³² that Adonis was a full grown man when he descended to Persephone he forgets that these writers evidently follow the version of the legend according to which Adonis died in youth, killed by a bear, and was thereafter shared by Aphrodite and Persephone. Furthermore, according to the story of the dispute, the judgment pronounced was that Aphrodite and Persephone should share Adonis on equal terms. Only afterwards did Adonis decide to stay his 'own' third of the year also with Aphrodite. Why, therefore, should the scales weigh heavier for Aphrodite and she be exultant and Persephone mournful? The Greeks were fairly literal in such matters, nor do we find any such display of feelings on the other representations of the dispute—only signs of wrangling and entreaty. In fact we may recall here the reception given by Aphrodite to the decision as told by Hyginus (*op. cit.*) where Calliope, mother of Orpheus, is appointed judge of the dispute by Zeus and decrees that each of the goddesses should have Adonis for a half of the year: 'Aphrodite, however, was angry because he was not given to her for her own, and caused all the women of Thrace to fall in love with Orpheus and each to seek him for herself so that he was torn to pieces.' This is not an attitude of joy and triumph.

More important, however, than such details is another consideration. Supposing the Boston and Ludovisi reliefs are indeed screens of an altar, or at least parts of the same monument, may we not presume that this altar or monument was sacred to Aphrodite? For it is the birth of the

²⁸ Cf. e.g. Aleman, 28 s. 1281; Sappho, frags. 117 and 74; Pindar, I, 6 ff. and II; Stasimides, 43; Euripides, *Hippolytus*, 529 f. At the time of Hesiod, however, Eros seems to have been regarded as a primordial god, produced at the same time as Chaos and Earth (Hesiod, *Theogony*, 120 f.).

²⁹ Cf. for approximately contemporary representations a terracotta relief from South Italy, *Annali dell' Inst.*, 1867 p. (= Roscher's *Lexikon*, p. 1451); a terracotta relief from

Aegina, *Monumenti dell' Instituto*, I, 18 (= *Denkschrift antiker Kunst*, I, 53), and others mentioned by Furtwängler in Roscher's *Lexikon*, 'Eros', p. 1351 ff.

³⁰ *Op. cit.* p. 142 f.

³¹ On the other (the one in the Metropolitan Museum) Adonis is not present, hence the interpretation of the scene as the dispute of Aphrodite and Persephone is uncertain.

³² Cf. *op. cit.* p. 142.

foam-born goddess which is shown on one of the two principal sides. We may reasonably expect, therefore, the rest of the relief to represent subjects in direct and vital relation to the cult of that goddess. Is it likely then that the artist chose, as a pendant to the birth of the goddess, the myth of her dispute with Persephone over Adonis—which at best, was an obscure, little-known legend at that time? Let us take the parallel of the Parthenon. Here, in a monument sacred to Athena, we have represented on one pediment the miraculous birth of the goddess, on the other the settlement of her dominion over Athens—both incidents of great importance and of popular knowledge. An equally appropriate scheme was chosen, I think, for the 'altar' of Aphrodite. Aphrodite was the goddess of Love. A Homeric Hymn (V) speaks of her as 'Aphrodite the Cyprian, who stirs up sweet passion in the gods and subdues the tribes of mortal men.' Euripides describes her as 'she that sows love, gives increase thereof, whereof all we that dwell on earth are sprung' (*Hippolytus*, 449). As the goddess of Love, Aphrodite's chief function becomes the bestowal of the gifts of beauty, charm and persuasion that arouse love,²² the granting of a happy marriage,²³ and the giving of offspring.²⁴ And she can either bestow these gifts or she can withhold them. It is in this character of bestower or

²² Cf. e.g. *Homos, Iliad*, vii. 214 ff., where Aphrodite gives to Hera her griffin, 'fair-wrought, wherein are all her pichmentments; therein are love, and desire, and loving converse, that steals the wits even of the wise,' and asks 'methinks thou wilt not return with that unaccomplished which is thy heart thou desirest'; and the numerous references given by Furtwängler in Roscher's *Lexikon*, 'Aphrodite,' 400, and in Farnell, *Culte of the Greek States*, p. 759, note 170.

²³ Cf. e.g. Pausanias, i. 38, 12: 'At Naxos . . . Aphrodite is worshipped in a grove. People pray to her for various reasons and, above all, widows ask the goddess for husbands.'

Pausanias, ii. 34, 13: 'Various honours are paid to the goddess of this temple (i.e. to Aphrodite) by the Hermionians. Amongst others, it is the custom that every maid and every widow who is about to wed shall offer sacrifices here before her marriage' (cf. Fraser).

Pausanias, iii. 13, 9: 'There is (in Laconia) an ancient wooden image called Aphrodite Hera; it is the custom for a mother, at the marriage of her daughter, to mention to the goddess.'

Homos, *Iliad*, v. 429: 'but follow thou after the loving task of wedlock' (Zeus speaking to Aphrodite).

Apollonius, *Epics*, 10: 'There was a procession in honour of Aphrodite and the

newly-married took part in the festival.'

Greek Anthology, Dedicatory Epigrams, 297, Archias: 'Aphrodite, who presides over weddings.'

²⁴ Cf. Pausanias, i. 14, 7: 'The Cyprians least the worship of Aphrodite Omnia from the Phoenicians. Aegens introduced it into Athens, deeming his childlessness and the misfortune of his sisters were due to the wrath of the Heavenly Goddess.'

²⁵ Near the Hymettos was a shrine of Aphrodite with a spring the water of which makes fruitful the women who drink from it, and the childless become capable of bearing children' (Photius and Suidas under Κόλλος, *Hymos*).

Sophocles ap. Plut., *Moralia*, 756 n, speaks of Aphrodite as 'Αφροδίτη θάλασσα' (fertile/bringing).

Euripides, *Hippolytus*, 449 (quoted above).

Artemidoros, *Oneirocritica*, ii. chap. 42, esp. *Αφροδίτη*: 'She is especially good for bringing about marriages and partnerships, and in the birth of children, for she is the cause of unions and of offspring.'

Cf. also the references quoted by Farnell, *Culte of the Greek States*, ii. p. 759, note 148. The Oriental Aphrodite was of course principally a goddess of fertility (cf. Furtwängler in Roscher, *Lexikon*, 'Aphrodite,' p. 390 ff.), and it is interesting in this connection to remember the undoubted Ionian influence in the Ludovisi and Boston reliefs.

withholder of her bounties that the goddess, to my mind, appears on the Boston relief. To one woman she gives her heart's desire—be it husband, or lover, or man-child; to the other she denies it. Where she grants there is rejoicing, where she refuses there is sorrow. The symbol of the balance was a natural one to the Greek mind, as we see not only in the scenes of the *Psychostasia* (weighing of souls) already referred to,²⁰ but in the well-known representation—more closely allied in subject—of the weighing of small *Erotes* on an Apulian vase in the British Museum.²¹ Aphrodite herself does not do the actual weighing in our relief, but her representative *Eros*,—just as *Hermes* takes the place of *Zeus* in the scenes of the *Psychostasia*. *Eros* in this character of the executor of Aphrodite's will is of course familiar.²²

This interpretation of the Boston relief comes fairly near to Marshall's explanation,²³ quoted above, that *Eros*, the great primeval divinity, is weighing out to two wives the assurance of lineage . . . the continuance of the family in the male line by a grown-up son. But to my mind *Eros* is only Aphrodite's executor²⁴; it is the power of Aphrodite that is the real theme. So, while Marshall's theory rested largely on the interpretation of the Ludovisi relief as a woman in the act of child-birth, and fell with the rejection of the latter,²⁵ the new interpretation is based on the more probable identification of the Ludovisi relief as the birth of Aphrodite.

The underlying idea in this interpretation—the gods giving their gifts to mortals or taking them away at their own good pleasure, and the quiet joy and restrained grief with which human beings accept their fate—is thoroughly Greek. All through Greek literature we feel the vivid recognition of the power of *ἀνάγκη*, 'Necessity.' 'The fate given by the gods I must bear, being mortal' (*τὰς γὰρ ἐκ θεῶν ἀνάγκας θνητὸν ὄντα δεῖ φέρειν*), says *Oedipus*²⁶ when calamity after calamity has befallen him; and this is the philosophy of every enlightened Greek.²⁷ It would be difficult to imagine a more beautiful portrayal of the idea than that in the Boston relief—*Eros* smiling quietly in the impersonal manner of the immortals, as he settles the fate of the two women; and the latter, one the personification of joy, the other of sorrow, but both accepting the decision in the unquestioning way that mortals must. The idea is elemental and could only be adequately conveyed in a simple, direct treatment, such as that chosen by the Greek sculptor.²⁸

²⁰ Cf. Studniczka, *op. cit.* pp. 131 ff., who gives several illustrations of such scenes.

²¹ Walters, *Catalogue*, F 226, and Studniczka, *op. cit.* pp. 130 f.

²² Cf. *g.* references given on p. 7, note 6, and p. 8, note 1.

²³ Cf. *Burlington Magazine*, xvi. July, 1910, pp. 247 ff.

²⁴ This is also more in harmony with contemporary ideas; *Eros* as a primeval divinity is an earlier conception (see p. 7, note 6).

²⁵ Cf. Coakey, *op. cit.* p. 109: 'And if it be

rejected, Marshall's imaginative interpretation of the scene on the Boston relief must fall with it.'

²⁶ Cf. Euripides, *Phoenissae*, 1762.

²⁷ Cf. e.g. Aeschylus, *Prometheus*, 103 ff. and 514 ff.; Sophocles, *Fragmenta*, 234 ff.; Simonides, 19 ff.; Herodotus I. 91 = *Anthology*, xiv. 80.

²⁸ It might be urged that such a personification of an abstract thought is only known in later Greek art. But this is not so. It is true that the statue of *Eirene* and *Ploutos*

How does this new interpretation affect the identity of the seated figures on the side reliefs? Though they can no longer be actors in the Adonis story, as Studniczka tried to explain them, they remain what most commentators have already seen in them, 'types of worshippers of the divinity in whose shrine the monuments were erected.'²⁶ If we now assume that this divinity was Aphrodite, they become followers of Aphrodite—which is indeed the explanation definitely given by Caskey and others of the figures of the flute-playing girl and the woman burning incense, and more tentatively of the old woman and of the boy playing the lyre. Only now these votaries assume an appropriate place in the scheme of the whole monument. For, again, we are reminded of the Parthenon sculptures, where on the pediments are representations relating directly to Athena, while on the frieze is a long procession of her votaries celebrating her chief festival. In a humbler and less complete fashion the side figures of the Boston and Ludovisi reliefs represent the different followers of Aphrodite. The incense-burning woman and the flute-player have been quickly recognized as a married woman and a courtesan. Incense and music are, of course, appropriate forms of worship in Greece, also in special reference to Aphrodite.²⁷ Likewise the young boy playing the lyre is probably just what he appears—a young votary making music in honour of the goddess. The significance of the old woman is less obvious. It is youth, not old age, that we generally associate with the goddess of Love. Caskey's ingenious interpretation of her as 'la belle Heaulmière' grown old and thinking regretfully of her past,²⁷ seems to me more French than Greek in spirit. It is a subject that appealed to Rodin, but is it not a little too moralizing for a fifth-century Greek? Villon, not a Greek author, has had to furnish the description. It is difficult, one must admit, to find a convincing interpretation, especially as the object the old woman held—which might have given us the clue—has been chiselled away. But there are several possibilities which suggest themselves. We know that it was customary in Greece to have female slaves attached to temples. We have a description of these *τερόδουλοι* in Plutarch, *Moralia*, 557 D, who quotes perhaps from the *Ilionupersis* of Arctinus: 'And they without upper garment and with feet bare in the fashion of slaves in the morning sweep around the altar of Athena, without veils, even if grievous old age has come upon them.' Strabo, 272, speaks of

symbolizing Peace and wealth is generally explained by archaeologists as an innovation in Greek art, 'characteristic of the new tendencies of the period.' But we all know that we have such personifications in Greek vases at a much earlier period—as, for instance, the well-known Justice and Injustice contest on an early red-figured vase (Reinach, *Épigraphie des Vases Peints*, I, p. 353).

²⁶ Cf. Caskey, *op. cit.*, p. 113.

²⁷ For burning incense we may quote Pindar's *Elegy*, 122 (57): 'Ye that burn

the golden tears of fresh frankincense, full often soaring upward in your souls unto Aphrodite, the heavenly mother of Love' (tr. Sandys). For music we may recall the many flute-playing and lyre-playing votive figures found in sanctuaries of Aphrodite in Cyprus (cf. e.g. Olshafsch-Richter, *Kypros*, Pl. xvii. 5, and Myers and Olshafsch-Richter, *Catalogue of the Cyprus Museum*, Nos. 5302-5303, 5574, 5710-5715).

²⁸ Cf. Caskey, *op. cit.*, p. 116.

a temple of Aphrodite which 'in ancient times was full of female slaves of the goddess whom the Sicilians offered as fulfillment of vows, and many also from other places.' The old woman on the Boston relief might well have been such a temple slave grown old in the service of the goddess. Her general aspect—short hair, simple Doric chiton, and unclassical features would be appropriate.

Another possibility is that she represents a *τροφός* or nurse, who, by her association with children³⁸ and young girls about to be married³⁹ occupies a natural place in the cult of Aphrodite. Such old nurses occur in contemporary art and our old woman bears a striking resemblance to them.⁴⁰ Petersen's suggestion that she is a midwife⁴¹ would in this connection be quite possible, though it seems unnecessary to narrow her profession to that calling. At all events, whatever the special significance of the Boston old woman actually was, she can well have been some votary in the cult of Aphrodite, for in Greek thought her age was no bar for such a part.

In the Boston reliefs the architectural ornaments at the bottom are still preserved and in each of the four corners is carved an emblem—two fishes⁴² and two pomegranates. The fish is, of course, an obvious symbol of the sea-born goddess and has been so interpreted.⁴³ The pomegranate, on the other hand, has been associated with Persephone by the exponents of the Adonia theory 'as a fruit sacred to the Chthonian divinities' and has also been brought in connection with Hekate-Artemis. Marshall proposed that both the fish and the pomegranate had no direct reference to the figures above them, but were either emblems suggesting that the ritual of the altar resembled, in certain particulars that observed at Eleusis,⁴⁴ or were merely decorative.⁴⁵ If the monument was indeed sacred to Aphrodite, as we now assume, both emblems must of necessity be related to that goddess. As a matter of fact, both are attributes of Aphrodite,⁴⁶ and, what makes them still

³⁸ Cf. e.g. Homer, *Odyssey*, vii. 1 ff.; Anselmus, *Onomasticon*, 743 ff. We may here recall also the numerous Tanagra illustration of old nurse carrying children.

³⁹ Anselmus, *Epit.* 10.

⁴⁰ Cf. especially the *Görupen* on the *Pistoxenus* kylix in Schwerin (Hartwig, *Metastrophien*, p. 370); also other references given by Studniczka, *op. cit.* p. 130.

⁴¹ Cf. *Fem. alt. Rom.*, p. 142.

⁴² Identified variously as two red mullets (*Rev. Arch.* xvii. 1911, 152), and as a red mullet and a grey mullet (Studniczka, *op. cit.* p. 131).

⁴³ Cf. Studniczka, *op. cit.* p. 141.

⁴⁴ Cf. Marshall, *Burlington Magazine*, 1910, p. 230.

⁴⁵ Cf. Marshall, *Revue Archéologique*, vii. 1911, p. 152.

⁴⁶ For fish, cf. Athen. vii. 282 f. (see *Lexicon*, born with Aphrodite in the sea); Athen.

vii. 225 a, 284 f.; Hyginus, *Fabulae*, 197; also Keller, *Antike Tierwelt*, ii. p. 310; Fortwangler in Roscher's *Lexikon*, 'Aphrodite,' p. 393.

For pomegranate, cf. Athen. iii. 84; who, quoting from the comic poets *Antiphanes* and *Eriphos*, says that Aphrodite planted the *κασσιόπαια* (identified by most commentators as the pomegranate) in Cyprus; see also note of Olearius on Philostratus, *Vita Apoll. Tyran.* 4, 28, p. 188 f. The pomegranate occurs among the votive offerings found in a temple of Aphrodite in Cyprus (Olmsted, *Excavations, Cyprus*, p. 78). Aphrodite holding the pomegranate blossom appears on a *Laocöa* relief (Farnell, *Culte of the Greek States*, ii. Pl. XLVIII), and in a terra-cotta statuette (Garland, *Antikenische Bildhauerkunst*, Pl. XXX. 4, quoted by Farnell, *op. cit.* ii. p. 697). Cf. on this subject also Roscher *Lexikon*, 'Aphrodite,' p. 393.

more significant, both are symbols of fertility.⁶⁷ So that their presence on this monument which celebrates the function of Aphrodite as the goddess of marriage and offspring is singularly appropriate.

To sum up: If the Ludovisi and Boston reliefs are indeed pendants, that is, if they were parts of the same monument—as is indicated by the similarity of their form and style—then the subjects of the reliefs must also be closely connected, as probably relating to a single theme. The identification of the Ludovisi relief as the birth of Aphrodite suggests that this theme is one celebrating the works and the cult of that goddess. The interpretation of the Boston relief as emblematic of the power of Aphrodite over love and life carries on this theme in a natural and harmonious manner and makes the relief an appropriate pendant to the Ludovisi monument. The figures on the wings can then be fittingly explained as volarities of Aphrodite, and the emblems in the architectural ornaments as significant attributes of Aphrodite. The whole monument becomes a consistent whole. We have, it is true, no exact parallel in contemporary art for our new interpretation of the Boston relief, but for the identification of the Ludovisi relief as the birth of Aphrodite we likewise lack the support of similar illustrations. What is much more important in this case, the underlying idea and the method of representation, are thoroughly Greek in spirit, and in harmony with the prevalent conceptions of the period.

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⁶⁷ The fish through its power of rapid procreation (cf. O. Keller, *Antike Tierwelt*, II, p. 243; Engel, *Kypria*, II, p. 101; the promegone, on account of its many seeds (Stolnicka, *op. cit.* p. 128, quotes *Arctostichus ada. gen.* 5; II and 12 in this connection, who tells of Nana conceiving Attis by the mere touch of this fruit; cf. also Farnell, *Cults of the Greek States*, II, p. 107; *ibid.*; Bantolini, *Studia z. semiotikę, Religioznawstwo*, II, pp. 208 f.; Schweighöuser, note on *Athanasius* III, p. 84; Stolnicka's objection (*op. cit.* p. 128) that a symbol of fertility should not be placed beneath the woman whose request for offspring is refused does not hold in this case, since the symbol relates to Aphrodite's power; for otherwise why should it be repeated beneath the lyre-player? His objection to the mullet (*εργασα*) beneath the other woman as an animal supposedly unfavourable to the bearing of children (*Athanasius* 7, 325 a and d) can

hardly be taken seriously. Athenaeus's theory is based on a fictitious derivation of the place name Τρίψα from *εργασα*, so that we have no evidence that the festival was held in the fifth century B.C.; on the contrary, *Artemidorus* II, 14, basing his information on earlier writers, says: 'The mullet is good for childless women, for it has young three times, whereas Aristotle in his *History of Animals* and Aristophanes in his *Commentaries* say with probability that its name is derived.' It is moreover by no means certain that the fish should be identified as mullets. Though some authorities have done so, Professor Bradford Dean, of this Museum, one of the best experts on this subject in the country, tells me that he thinks it is more probably the common carp that is represented—which all goes to show that it is dangerous to base important theories on trifles.

POSTSCRIPT.

When I wrote the above I had not read W. Klein's article in *Jahrbuch*, 1916, p. 231, 'Das falsche Bostoner Gegenstück,' which, on account of war conditions, only recently reached America. Klein makes three contentions which call for brief mention here as affecting my interpretation: (1) That since the Ludovisi and Boston reliefs vary in measurements they could not have belonged to the same monument. (2) That the subject of the Ludovisi relief represents a woman in childbirth. (3) That the Boston relief is a modern forgery.

The forgery theory was advanced—though a little more tentatively—by Ernest Gardner in *J.H.S.*, 1913, pp. 73 ff. It was answered by R. Norton in *J.H.S.*, 1914, pp. 66 ff. and has also been dealt with by Caskey in his publication of the monuments in *A.J.A.*, 1918, pp. 126 ff. Caskey had not then seen Klein's article, but several of Klein's difficulties, such as the treatment of the hands, the drapery, the cushions, the architectural motives, are there discussed, so that further comment seems unnecessary. Klein's curious objections to the nudity of the lyre-player, to the resemblance of the lyre-player to Myron's Diskobolos, to the mourning woman as a veritable 'Jammeregestalt,' to the position of Eros' left hand, will be shared by few students of fifth-century art and need not concern us here. It is easy to lose oneself in specific details and to set up arbitrary rules and standards which we think Greek artists should have strictly followed, even at the period of their most adventurous experimentation. It is much more difficult to believe that a modern forger could become so steeped in the Greek spirit that he could model the human body, represent drapery, and compose like a Greek. Quite apart from the question of artistic merit (since an appreciation of that is, it would seem, a matter of individual taste), we should remember that the modern forger has a very different psychology from that imputed to him by Klein,—as anyone who has had extensive experience with pseudo-Greek works knows. He has not that elaborate archaeological background and accurate knowledge of styles and periods that Klein himself must presuppose for the sculptor of the Boston reliefs. And if there is anyone who can produce so consistent a whole as the Boston monument, where are his other works?

With regard to Klein's argument regarding the variations in the measurements, it will be seen by Caskey's table (*op. cit.* p. 102) that these are really small: as Caskey says, 'the comparatively slight variation between the two monuments in the width of the front at the top, and in the height at the ends and at the apex of the gable, can be reasonably explained as due to differences in the composition of the reliefs.' Greek architecture is full of such variations and irregularities (*cf. e.g.* Goodyear, *Greek Refinements*,

pp. 161 ff.); in fact, any artist would consider the demands of his composition more important than mechanical accuracy.¹

Of Klein's objections to the interpretation of the Ludovisi relief as the birth of Aphrodite, the only serious one is perhaps the absence of any indication of water; for few will see with him an expression of pain in the radiant face of Aphrodite, or object to the presence of two helping maidens. But to most minds trained in Greek conceptions, the pebbly, sloped ground suggests water as easily as a column on a vase suggests a house, or a flower a meadow, or a chair an indoor scene. Such shorthand method of expression is characteristically Greek; but what appears to me essentially not Greek is to introduce a stony slope in a childbirth scene where it is not wanted, merely because it helps the lines of the composition, as Klein would have us believe.

G. M. A. R.

¹ Mr. William B. Dinsmoor suggests that the variation of measurements in the two monuments is due primarily to the difference in size of the two respective blocks of marble. The one which served for the Ludovisi relief was somewhat smaller, so that the sculptor had to be economical of his stone; hence the

slight depth of the relief, the fact that it is kept all in one plane, and the addition of the architectural ornaments in separate pieces—all points in which the Ludovisi monument varies from the Boston one, where no such economy of marble was necessary.

NOTICES OF BOOKS.

Attic Red-Figured Vases in American Museums. By J. D. BEAZLEY.
Pp. x+236. 118 illustrations in text. Cambridge, Mass.: Harvard University Press. London: Humphrey Milford, Oxford University Press, 1918.

This book is the result of a visit to the United States in the course of which the author was able to examine at first hand practically all the red-figured pottery in American Museums. He selects for discussion, or at least for mention, some four hundred pieces, about half of which are in Boston and a quarter in New York, while the rest are scattered through a dozen smaller collections belonging chiefly to universities and colleges. Considered merely as a report on vases in America, which, by reason of their location and the lack up to the present of adequate catalogues, have remained inaccessible to the majority of scholars, the book performs a service of very great value. But this report, which furnishes an excuse for the publication and justifies the title, is in reality only a by-product. The author's purpose in studying the vases was, as he tells us, 'to try to find out who painted each.' And, he continues, 'the greater number of the painters being both anonymous and hitherto unknown, I have been obliged to write down lists of their works whether preserved in Europe or in the United States.' Furthermore, 'Most, one might say, of the archaic, and many of the later painters in red-figure are represented in America by one or more pieces. It follows that the vases mentioned in this book form no inconsiderable fraction of extant red-figured vases.' The book thus becomes a preliminary study for a complete history of Attic red-figured vase painting. The materials for such a history—the extant vases—might be compared to the pieces of a gigantic picture puzzle which has been in course of reconstruction during the last half-century. The main outlines of the picture had long been known: the majority of the pieces had been placed approximately where they belong. Mr. Beazley's predecessors, such as Klein, Hartwig, Ertwangler, Hauser, had filled many places together into groups based on potters' and painters' signatures, on color-names, and to a limited degree on style. Mr. Beazley himself had filled in large gaps by his identification of fourteen anonymous masters on purely stylistic grounds. Now, following the same method, he brings to light at one stroke no less than fifty more unknown painters, besides furnishing revised and augmented lists of the works of his fourteen anonyms, and much needed new arrangements of the groups previously put together. This is a sensational achievement, and like all sudden steps forward in any branch of human knowledge it will doubtless not meet at first with universal acceptance. There will be talk about the impossibility of success in such an attempt, about the waste of time on microscopic researches which are not worth while, about faulty methods. The only test of a method, however, is the results achieved by following it. And those to whom, thanks to the author's earlier studies, the style of some of the nameless masters who decorated large vases in the ripe archaic period has become as familiar as that of any of the traditional 'Big Four,' will follow with equal fascination and confidence the new trails which he has blazed. It must be admitted that the 'Morrillian method' which he employs has its dangers; and it is a matter for congratulation that the ground has been so thoroughly

covered in the present book, leaving comparatively little to be gleaned by less competent investigators. That Mr. Beazley himself possesses the necessary qualifications—complete command of the vase literature, intimate first-hand acquaintance with a very large proportion of the extant vases, and a marvellously sensitive eye for detecting minute differences of style—is apparent on every page of the book. Whatever revisions of single attributions may be necessary, his main results will stand. And the way has been cleared for a complete history of this branch of Greek art, in which details can be subordinated and the important features of the picture receive their due emphasis.

The book embraces the whole development of red-figured painting down to the close of the fifth century, but most of the space is fittingly devoted to the masters of the archaic style. In the chapters on the early archaic period the most interesting figures are Oltos, who appears in quite a new light with fifty-two vases to his credit, and 'the dainty Epiktetos' of whom the author pitifully remarks: 'You cannot draw better, you can only draw differently.' Hartwig's Chalkrylion vases: the vases from the pottery named by him are divided among three painters. Similarly 'the style of Pamphaios' is shown to be a meaningless phrase: there are vases from his factory which bear the signature of Epiktetos as painter; others are by Oltos; still others are from the hand of a nameless artist who worked for Nikosthenes as well. By distinguishing the different styles, and by collecting the works of the anonymous artist whom he calls after his masterpiece 'the painter of the London Sheep and Death,' Mr. Beazley brings order out of chaos. A brief chapter is devoted to the painters Euphronios, Phintias and Euthymios, who are ill-represented in America. The Euphronios problem would demand a book by itself. Mr. Beazley in addition to his attributions of fourteen vases to Euphronios states what pieces he would assign to the 'Phintias Master' evolved by Furtwängler, and distinguishes from these the works of [Onos]imos whom he regards provisionally as a separate artist. The former is admirably represented in America by ten vases out of a total of thirty-two, eight being in Boston. In the same collection are also some five examples of the work of the Brygos painter, to whom seventy vases are given. Two imitators of the latter, the 'Berlin Foundry Painter' (Hartwig's 'Diogenes Master') and the 'Painter of the Patin Gigantomachy' are clearly differentiated from their master and from one another. The author's important contributions to our knowledge of the painters of large vases in the ripe archaic period are familiar to readers of this Journal. The works of the Berlin painter are brought up to ninety-nine, those of the Kleophrades painter—who may be said to play a kind of Florentine to the Berlin painter's Simon, and who, 'for the giant power of his standing or moving figures has not quite his equal among vase painters—now number about fifty; those of the Pan painter are increased to fifty-three. Some new painters of this class make their debut in the present book, one of the most interesting being the 'Flying Angel' painter, so called after his picture of a silen holding his small son on his shoulder, on an amphora in Boston. Furtwängler's 'Panthelios Master,' a painter of strong individuality, but of very uneven merit, is represented in America by two or three excellent pieces and by many others which 'present a dreary spectacle of talent commercialized.' It is interesting to note that these American examples were studied independently by Miss Swindler and by Mr. Beazley, and that their lists agreed very closely. A similar coincidence occurred in the case of the Villa Giulia painter, Frickenhain in his *Leitensheim* ascribing to one hand fifteen vases, thirteen of which Mr. Beazley included in his list. The period of the developed free style produced one painter of the first rank—the Achilles Master, whose works in red-figured and in polychrome technique Mr. Beazley has already collected in an article in this Journal. From this time on the art rapidly degenerates, the monotony being relieved occasionally by such figures as the 'Painter of the Boston Phiale,' the 'Lykaon Painter,' and the 'Kleophon Painter,' until the line which began with Andokides dies out ingloriously with Meidias.

It is a remarkable thing that a book composed largely of lists which are intended for the specialist should make such interesting reading. One hesitates between admiration of its levity and regret that the author has not given us more of his happy characterizations

of the various artists and more longer passages such as that in which the innovations brought in by Euphronios, Phintias and Euthymides in the rendering of the human form are described (p. 27), or the one in which the decline in vase painting coincident with the rise of fresco painting under Polygnotos and his co-workers is explained (p. 142). His incidental remarks on the forms of vases show that he is equally at home in this branch of the subject which has been strangely neglected in the past.

The book is attractively printed and well illustrated, making available a large amount of unpublished material. The half-tone reproductions of photographs are unusually clear, and the practice of illustrating one or two figures from a painting on a large scale is to be commended. A few of the author's tracings are reproduced directly, but unfortunately, for some unexplained reason, the majority of them have been redrawn, and have suffered seriously in the process. This, and the absence of a list of the new masters, either under the chapter headings or in an index, are minor blemishes hardly worth mentioning in connection with a book which is easily the most important single contribution ever made to the study of Aïtic vase painting.

L. D. O.

A History of Greek Economic Thought. By A. A. TREVER. Pp. 162. University of Chicago Press, 1916. 3s. 6d.

This book, which derives its inspiration from Ruskin's protest against Victorian economics, endeavours to show that Greek economic theory was essentially post-Victorian. In this attempt Mr. Trevor has been largely successful. His conclusions are based on a painstaking study of the Greek authors. He does not indeed mention the acute observations of Isocrates and the 'Old Oligarch' on the economics of imperialism, the speculations of agrarian writers on 'diminishing returns,' or the wrangle of the higher teachers over the propriety of payment for professional services; and he assumes too readily that the opinions expressed in Demosthenes' private speeches represent the orator's personal judgments. But his survey of Greek texts is wider, and his interpretation of them more careful, than that of his predecessors. But the chief feature of the book is its perpetual emphasis on the fact that Greek economists never 'won the means of life by losing life itself,' and that many of their pronouncements which at first may appear obscure and to us are but applications of their correct principle that economic science, like every other science, is subordinate to the science of human welfare. At times Mr. Trevor is over-indulgent to the Greek writers. Though he frankly criticises some of their weaknesses, e.g., their tendency to asceticism and their self-contradictory defence of slavery, he passes over some of their most marked deficiencies, e.g., their failure to discern that slavery is unprofitable in the long run—a fact known to several Roman writers—and that the key to many of the problems that vexed them was the intelligent use of machinery. Conversely, he bears too hard on the 'sordid' modern socialists, many of whom are seeking, like Ruskin, to supplant the cash nexus by a bond of social co-operation. Neither is he quite fair to the 'orthodox' economists, for these cannot be held responsible for the misuses which others have made of their abstraction, the Economic Man. But Mr. Trevor has generally displayed the Greek economists in the right light, and his exposition of their doctrines has come at an opportune moment.

Solon the Athenian. By IVAN M. LINFORTH. Pp. vii + 318. Berkeley: University of California Press, 1919. \$3.00.

This book contains a critical biography of Solon, a text of his poems, with translation and commentary, and a series of appendices on special problems arising out of Solon's story.

The chief feature of the biographical part is the thorough-going scepticism of the author, which induces him to reject almost the whole of the traditions concerning Solon, except what is based on Solon's own poems. This scepticism, on the whole, is justifiable. Mr. Linforth probably oversteps the mark in doubting the authenticity of the decree of Ariston; but he makes out a good case against the hard-dying theory that any considerable number of Solon's laws survived to the fifth century.

The many knotty problems of interpretation contained in the poems are discussed fully and with good judgment. The translation, however, is ungainly, and does not reproduce the pithiness of the original.

The discussion on the *droptic* of Solon's personal history, and especially on the conquest of Salamis, is well done. Apart from a very credible suggestion that Solon rather than Draco codified Athenian law, the author has nothing striking to say on constitutional questions, which he treats rather summarily. In his chapter on Solon's monetary reforms he follows de Sanctis in dividing the Aeginetan currency mina into 70 drachmas. This theory lacks proof and it has the disadvantage of establishing a difference of weight between the currency mina and the commercial mina. Another unlikely suggestion is that the reform in the coin standard was the result of a gradual adjustment to altered trade conditions, and not the single act of Solon. Alterations of this kind are usually due to the more or less arbitrary action of men in authority.

Mr. Linforth does not give us any clearly drawn portrait of Solon. But he rightly emphasises that Solon's work was none the less effective though its success was not immediate.

Minolde Mynas et ses Missions en Orient (1840-1855). Par HENRI OUMET (Extrait des *Mémoires de l'Acad. des Inscriptions et B.-L.*, tome xl). Pp. 83. Paris: Imprimerie Nationale, 1916.

Minolde Mynas, though not much known to-day, deserves to be remembered among those who have enriched the collection of Greek MSS. in the Bibliothèque Nationale, and as the fortunate discoverer of the British Museum MS. of Babrius. He seems to have been far from impeccable as a scholar and his swans were often geese, nor was he perhaps, if we may judge by the fate of several of the MSS. obtained by him on his mission as agent of the French Government, as scrupulously honest as he might have been; but he certainly did good work in the examination of Greek monastic libraries and the collection of Greek MSS., and M. Oumet's study was well worth undertaking. He gives a short biography of Mynas and an account of his missions, which he follows up with the texts of various reports sent home by him to the Minister. At the end are given lists of the MSS. collected by him. In all cases where identification is possible, the mention or description of the MS. is followed by a reference to the number it bears at present in the Bibliothèque Nationale. These identifications, which must in some cases have involved considerable labour, will make the work extremely useful to students of the collection who wish to discover the provenance of the individual MSS.

Les Cultes Egyptiens à Délos du III^e au I^{er} Siècle av. J.C. By PIERRE ROUSSEL. Pp. 300. Paris: Berger-Leclercq, 1916. 10 fr.

Monsieur Pierre Roussel has collected in this handy volume all the epigraphic material relating to the cult of the Egyptian divinities at Delos from the third to the first centuries B.C., including everything yielded by the recent excavations of the three *Sarcopées*, has published in it the plans prepared by M. Bisson under his supervision of the three temples, has described them, and has illustrated a few of the more important antiquities found in them. Of very great interest is the late-Doric column bearing the inscription

on his part some hesitation to accept their authority. On the matter of the vedive ears, a common thing in ancient Egypt, M. Roussel says that M. Capart, *Rev. Hét. Ét. É.* II, 1905, p. 251, *voit* (the italics are mine) que le dieu *Menkentia*, cité par un papyrus de Tebtunis, n'est autre que "les oreilles qui entendent." M. Capart believes this with reason: *oreille vedive* was in Egyptian 'the ear that hears.'

With regard to the Agathodaimon serpents, whose cult at Alexandria is so well known (cf. the representation in the catacombs of Kom el-Shangafa), M. Roussel writes: "Selon Weber: . . . la déesse serait Thormouthis, le dieu, Psou, plus tard Oueseph; Du moins est-il certain que le couple fut identifié avec Isis et Osiris sous leur forme de serpents." Isis and Osiris had no serpent-forms in ancient Egyptian iconography except in so far as such a snake-deity as the Theban necropolis-goddess Mirkhoker was identified with Hathor of the Waste and so with Isis. The Alexandrian serpents were, as Weber says, figures of Thormouthis (Ermet) and Psou (Psou), the latter being deified luck or destiny, *Sp. Is.* No doubt the popular syncretism of Ptolemaic and Roman times identified them with Isis and Osiris. Ounôphris is Osiris-Ounepher, and Osiris then = Sarapis. M. Roussel refers (p. 247) to 'In détail, toujours ouvert, sur l'origine du Sarapis.' I fancy it is considered by the Egyptologists to be closed. Letroune long ago suggested a probable origin for the Sinope-story: Sarapis (Asar-Hapi; Osiris-Apis) came from Sen-Hapi, *Zoser*, 'the place of Apis,' the modern Sakkarah. But the classical scholars still go wandering up and down the shores of Pontus vainly seeking Sarapis. The purely Greek type of the god (as usually represented) is remarkable, and is probably of Syrian origin.

The feet cut upon a slab of the temple (Fig. 15) are a common ancient Egyptian *ex-voto*. It occurs as early as the eighteenth Dynasty at Deir el-Bahari, for instance, and there are probably older examples.

We notice that M. Roussel has not been able entirely to get rid of the French inability to spell foreign names and words. In a note on p. 286 Mr. Blackman is turned into a German, as 'Blackmann' (probably because his paper quoted appeared in *Abg. Zeitschr.*), and the German Wislmann becomes 'Widmann.' In English quotations the word 'marble' usually appears as 'marbre.' However, we will pass over these little foibles. M. Roussel's plans are very clear and good, and the few illustrations of the temples and of objects recently discovered in them are useful. We wish that M. Roussel had republished the Egyptian inscription mentioned on p. 65: was it not as well worth republication in a collection of inscriptions from the Egyptian shrines of Dola as the many unimportant little Greek *ex-votos* which he has republished? H. R. H.

Recherches sur le Traité d'Isis et d'Osiris de Plutarque. By LEON PARMENTIER. Brussels: Lambert, 1913. 5 fr.

The war is responsible for the delay in reviewing this interesting little book. With matters temporarily more important than archaeology obtaining the whole of the reviewer's days and much of his nights also, it was inevitable that works not of first-class importance should have to wait till the war was over before they could be read.

M. le Professeur Parmentier says in his preface that his aim is purely philological, that of the criticism and exegesis of Plutarch is the first place, and that it is only incidentally that such questions as the supposed Sinopic origin of the god Sarapis, or Plutarch's attempt to prove that the Egyptian gods were of Greek origin, comes into his purview. He is, however, interesting on the archaeological as well as the philological side. The discussion on the magical properties of bronze, *à propos* of the disputed line *διὰ χαλκῶς ἡγούμενος ἰσὺς χυλόμενος ἐκλαμπέσθαι* (rightly translated, Prof. Parmentier thinks, by Amyot as 'c'est pourquoy nous mettrons la main sur tout vase de bronze et de cuivre qui nous fait du bruit pour le faire cesser') is entertaining as well as learned.

On the subject of Sarapis and the romance of his Sinopic origin, Prof. Parmentier well sums up the general modern opinion as definitely against the Sinope story and in favour of the natural adoption of the god from Egypt, Sarapis being simply Asar-Hapi, Oesirapis, and 'Sinope' the *Zwénias* *Kea* of the Memphis desert, east of the worship of Asar-Hapi, which bore in Egyptian the name Senhapi ('son of Apis'), translated in a bi-lingual description as 'Anceur'. The whole story was simply due to a miscomprehension of this Egyptian Sinope name. The Plato statue is quite likely to have come in reality from the Syrian Sidakela, whence one version of the story brings it. Hadra was the natural Greek equivalent of Oesirapis. All this was shown a century ago by Champollion and by Letronne, but the facts have been curiously ignored by classical scholars, while wind-spinning Germans have sought for the origin of Sarapis in a hypothetical 'Sarapis' ('Prince of the Abyss'), the Babylonian god Enki (who was a god of the sea, but not of hail), brought to Greece via Sinope of Pontus, and have denied that Sarapis can equal Oesirapis because there is no *o* at the beginning of his name; to such fuddling criticism does the illud following of a philological *Diaploia* lend the Teutonic mind. *Es muss so sein!* But it usually isn't. It was necessary a few years ago for Bouche-Leclercq and Pauline Lévy again to point out the obvious, and, with modern critical material to their hands, to show that the Sinope story is nothing whatever, but a sensational novel, a work of fiction, in which even many of the characters (*e.g.*, Skyrimothemia, 'king of Sinope') are imaginary. Scott-Moncrieff in his article on the *de Iude et Oecide* from the Egyptological side (*J.H.S.*, xix. (1909), pp. 77ff.) held the correct view of Letronne as to the origin of the names, and M. Parmentier fully agrees. The matter may now be considered *close jugé*.

M. Parmentier is also interesting on the Egyptomania of the earlier Greek writers and the legends connecting Greece with Egypt, which Plutarch turns inside out in mentioning the reactionary thesis that it was the Egyptian gods who came from Greece rather than the reverse. He also discusses the Egyptian names, words, and significations of them mentioned by Plutarch in a way that will interest Egyptologists as well as classical scholars.

Picus, who is also Zeus. By RONDEL HARRIS. Pp. 76. Cambridge University Press, 1916.

The Ascent of Olympus. By RONDEL HARRIS. Pp. 140, 10 Plates. Manchester University Press. London: Longmans, Green & Co., 1917. 5s. net.

In the nine loosely connected essays which form the first book Dr. Rondel Harris follows up the theme of *Beowulf* and his other earlier works dealing with the cults of the Thunder-God, who is a red woodpecker and who dwells in the oak, and of twin children who are the sons of the Thunder-God. The longest chapter is devoted to a study of English place-names, derived from the woodpecker, as evidence for the existence of the cult in England. A subsidiary study of the names for the woodpecker in dialect or folklore suggests that it is the rain-bird and the protector of travellers, and under these aspects performs the same functions as the Dioscuri, the sons of Thunder. The remainder of the book is occupied by discussion of various myths connected with twin worship, of the cult of the Dioscuri at various sites along the Bosporus, and of an inscription from Ain Tab, which suggests twin-worship in the cult of Jupiter Dolichenus.

The second book contains four lectures, dealing with the cults of Dionysos, Apollo, Artemis, and Aphrodite respectively, which were delivered during 1915 and 1916 in the John Rylands Library, Manchester, and are here reproduced with several appendices and illustrations. To summarize the conclusions obtained:—Dionysos in the most primitive stratum of religious thought was the parthenical ivy growing on the Thunder-Oak, which was Zeus, hence in some degree he is a lesser Zeus and a minor Thunder-God. Apollo is traced back to a similar parasite, the mistletoe, and also to the hurrel, the peony, and the apple-tree; in fact the word Apollo is no other than apple, taken over into Greek from one of the northern forms of the root. The connection between all these plants is to be

found in their early employment for medicine: Apollo came from the Hyperborean north, bringing his garden of healing simples with him. He also brought the belief in the curative virtues of mice, frogs, and lizards, which crystallized later into the cult of Apollo Smintheus and the serpent-type of the Sauroktonos. Artemis is the witch counterpart of the medicine-man, Apollo; her plant is the common mugwort (*Artemisia vulgaris*), which has special virtue for healing diseases of women and ailments of children and as a safeguard from misfortune. Lastly, Aphrodite is the mandrake, or love-apple, anciently conceived to be of human form, male and female, or black and white; hence the occasional traces of bearded or black Aphrodites. Unlike the other cults, which show northern origin, the cult of the mandrake appears to have come into Greece from the Levant, possibly from Cyprus.

Testimonies. By RENDAL HARDE, with the assistance of VACHER BORDIE. Pl. 1
Pp. 158. Cambridge University Press, 1916.

This is the first part of a work which aims at the recovery of the 'first known treatise on Christian theology'. It collects the proofs of the existence of an Apostolic work which has passed into obscurity and it shows along what lines, by collation of the Fathers, it may be possible to restore the text. Part II. is to be devoted to the recovery of this text.

The work in question is a collection of passages extracted from the Old Testament for controversial purposes against the Jews. There are still in existence early Christian works which are little more than a succession of such anti-Judaic texts with accompanying commentaries. These should be traced to one original, which ante-dates the New Testament literature and by which the problem of the Johannine quotations should be explained. This original was attributed to Matthew and was divided into five sections, which were the basis of the five books of 'Commentary on the Dominical Oracles' compiled by Pankas in the second century, and possibly of the five books of Hesychius on the Apostolical Preaching; it will appear to survive in a sixteenth-century manuscript at Mount Athos described as *Matthew the Monk against the Jews*.

The Iohninae of Sophocles. By RICHARD JOHNSON WALKER. Pp. xix + 644.
London: Burns and Oates, 1919. £3 3s. net.

This book contains a new text of the play, an English version, elaborate discussion of the style, vocabulary, plot and metres, essays on the Satyric Drama and on the origin of Tragedy, reconstructions of alleged lost works of Sophocles, and an Appendix on tetralogues. Like *Arctiades*, it is erudite, enthusiastic, speculative, and in consequence to a postmodern critic baffling.

As an example we may take the author's treatment of line 15, where Hunt reports
 [. . .] *ἄλλοτε πάντες* [. . .] *ἐκείνην* (i.e. four or five letters are lost at the beginning, *θ* is doubtful, and the papyrus gives us no correction) as Mr. Wilamowitz reads *ἀλλοτε πάντες* and Pearson *ἀλλοτε*. Mr. Walker suggests *ἄλλοτε πάντες* (sic) *ἐκείνην* (sic) *ἐκείνην*, 'the business that most is in hand, unlike unto myself, I contend with my head discovered.' For *ἐκείνην* in this sense he can cite, for what it is worth, line 218 *ἐκείνην* *ἐκείνην* *ἐκείνην* (W-M type). Elsewhere he can find nothing nearer than the very different *ἐκείνην* of Il. vi. 321. *ἐκείνην* is a Dorianism used by a Megarian in Aristophanes and by certain Alexandrians. Mr. Walker thinks it characteristic of a Satyric dialect conventionally adopted by Sophocles from Pratinas. For *ἐκείνην* he adduces *ἐκείνην* *ἐκείνην* *ἐκείνην*, not very convincingly, from Herodotus. Finally, he believes that the whole line describes the appearance of Apollo, in the costume

appropriate for a person who is conducting a search for stolen goods. The Roman searcher *per lucum et lucum* carried a dish and wore a loin-cloth or a tunic; Apollo carries a mortar and appears without a hat. Aristophanes and Plato are our witnesses to prove that an Athenian who entered another man's house to search it must do so *perieus* or wearing an ungirded tunic. But the dish? Gellius, Mr. Walker tells us, quotes Festus for the assertion that the Roman custom was derived from the Athenian. Unfortunately Mr. Walker's memory is at fault. Gellius does not quote Festus on this topic. The seventeenth century commentators on Gellius do. And even so, it is not Festus but the commentators who suggest that the Athenians gave the Roman legislators their precedent. But even if Festus had said what Mr. Walker thinks he said, it would, in the absence of further evidence, be dangerous to assume that Festus had in mind an Athenian use of a dish. And after all, a dish is not a mortar, nor do undergraduates necessarily discard all garments save their shirts when they walk about the streets, as is their custom, without hats.

Mr. Walker is on safer ground when he suggests that Apollo may have carried a heron's staff which may have been exchanged by him at the end for Hermes' lyre. It is also possible, though not proven, that this staff was of gold, and played a part as an earnest of future reward in the transaction between Apollo and Sileus. But Mr. Walker's ingenuity is not exhausted. He can tell us why Sileus gives back the staff to Apollo. It is because the Satyrs have gone mad, and because Apollo wants the lyre in order to restore them to their senses, and because, without the staff, he cannot buy the lyre from Hermes. All that is wild, improbable conjecture. Who sends the Satyrs mad? Pan, we are told, whose shrine the Satyrs have desecrated. But the Papyrus never mentions Pan? That is because all references have been corrected out of sight by an intelligent but superstitious scribe who worshipped Pan of Panopolis—so near, you see, to Oxyrhynchus—and did not like the way in which Arcadian Pan was represented. This same Pan, according to our author, is the Master from whom Apollo promises to free the Satyrs. There are difficulties in this view, but they disappear 'if we assume' that a successful searcher *via lucum et lucum* had a right to manumit other people's slaves who had helped him. What if we assume that he had no such right, a far more probable assumption?

This method applied to the early history of drama naturally proves fruitful. Borch conjectured with some plausibility that the name of Pratinas is concealed in the scholiast's *topos* on O.C. 1376. Mr. Walker, elaborating this conjecture, and rewriting with much ingenuity the fifteen verses which he is thus enabled to claim as the work of Pratinas, deduces from this uncertain and exiguous text a theory of the metres, plots, and dialect of the poet. He defends as genuine the famous fourth fragment of *Thespis*, and can tell us what were the original words on which the anagram which now makes nonsense of the passage was superimposed. Having revived Alcæus Tragicus, an alleged Athenian predecessor of *Thespis*, he makes out a case, more reasonable than some of his theories, for the existence in antiquity of a dialogue written by Sophocles in prose about the chorus. He does well, again, to insist that Arion is not alleged by Suidas to have used a Satyr chorus, but only to have introduced Satyrs 'speaking' verse. The well-known phrase *typhos oryza* means, he thinks, that Arion made his chorus stand inactive while the Satyrs spoke their lines. *Thespis* added an actor to the chorus, but did not use Satyrs. Pratinas used the Satyrs as his chorus. Epigonus, working at Sicily for anti-Dorian, phil-Athenian employers, reduced but did not venture to abolish the Dorianism in the choral element of the old ritual, but introduced a new 'sub-dialect,' Attic or Ionic in flavour, in spoken interludes. The doctrine is plausible, but rests on no convincing evidence. We can only admire, but not accept, the reconstruction of a supposed Eurymachus written by Sophocles to be sung at Delphi by the choir-boys at the breaking-up festivity before Apollo's annual journey to the north; nor can we do more than mention the elaborate Appendix and the attempt to prove that Sophocles composed his *Thuban* plays as a trilogy.

Les Traffiquants italiens dans l'Orient hellénique. Par JEAN HATZFELD. 407 pp. Paris: De Boccard, 1919.

M. Hatzfeld's study of the Italian community resident in Deles, based on an exhaustive examination of the inscriptions, served as a preparation for the present work, which covers a much wider ground and is marked by the same thoroughness. It was completed in 1914, but little fresh material has come to light since that date. The volume of the new *Corpus* of inscriptions dealing with Euboea appeared too late to be of use to the author, but it contains very few items relevant to the subject. We may note, however, that the inscription from Chalcis mentioned on p. 70 is treated by the editor as a list of honorary gymnasiarchs and not as the record of a college of *res*. M. Hatzfeld draws some interesting conclusions from the distribution and dating of the inscriptions: he finds, for example, that the great importance of the Roman *negotiatores* in the Levant was confined to the first century B.C., and from this he deduces the cordillary that Mommsen's verdict on the destruction of Carthage and Corinth as a measure of 'mercantilism' is at least exaggerated. In some instances it may be questioned whether the *argumentum ex silentio* (which he uses freely) will bear the weight laid upon it. For example, M. Hatzfeld finds no trace of Roman traders in S. Russia, and assumes that they did not venture so far afield. The evidence of tomb-paintings however shows that gladiatorial shows were introduced into this region, and this is usually held to be good evidence of the presence and influence of Romans. Again, M. Hatzfeld casts doubt on the prevalence of organised *conventus civium Romanorum* (of which Kornemann and Schnitten have made much). Here, again, the *argumentum ex silentio* seems to be a little overworked. 'If,' he says, 'there had been such *conventus* in Asia at the beginning of the first century B.C., they would have had an excellent opportunity of manifesting their existence at the time of the massacres of 88'—but we do not hear that they took any concerted measures of defence. Is this surprising, considering the meagreness of the record? By the way, is M. Hatzfeld right in translating *ῥηγάται ἱάται* 'bear toge carriers' (which those who had recently acquired the *chiton* exchanged for 'la tunique Grecque')? Surely the words of Posidonius—*ἡρασιπρεπῆσιν ῥηγάταις ἱάταις*—mean that they put on Greek *ἱάται* in place of the *toga*, which was segmental in outline.

The list of *gentes* to which the *negotiatores* belonged given at the close of the volume is exceedingly useful, and shows that this class was largely recruited from S. Italy. This, no doubt, is the reason why we hear of 'traders' rather than 'Peoples' in the earlier inscriptions.

La Loi de Hiéron et les Romains. Par JÉRÔME CARCOPINO. 307 pp. Paris: De Boccard, 1919.

This work might be described as an introduction to the third Verrine oration of Cicero, which was certainly useful in view of the recent literature of ancient economic history. M. Carcopino deserves credit for his exhaustive survey of the evidence (and modern interpretations thereof), his lucid statement of the problems arising therefrom, and his logical handling of those problems. It was not, perhaps, always necessary to demolish hypotheses long since abandoned, such as that of Götting with regard to the *ἐπιστάδοι* of Acme; but M. Carcopino prefers to err on the side of completeness. His criticisms upon the theories of his predecessors are acute and generally convincing; but it is not always easy to follow him in the solutions which he adopts. For example, the result of a lengthy discussion of the *ager censorius* (p. 225 ff.) seems inconclusive: it is hard to accept the view that in the well-known passage iii. 6, 13 (*perpencus civitatis . . . bello subiectis: quoniam ager cum esset publicus populi Romani factus, tamen ille est redditus; is ager a censoribus locuri solent*), the closing words form a parenthetical remark concerning *ager publicus* in general. We are not loth to admit that the *perpencus*

ciuitates cannot number 29 out of 65: but some such cities there must have been; and M. Carcopino throws no light on their identification. Nor do we feel sure that he has cleared up the really difficult question—if indeed it is soluble—of the relation of the *edicta* of Varro to the *lex Horatiana*: but his closely-reasoned arguments are at any rate worthy of serious consideration.

The *senatus consultum* referred to in iii. 81, 188 is, no doubt, as M. Carcopino says, the *S.C. de ornamentis praefecturae*: but it is not so clear that this explanation will hold good for the passage (iii. 70, 183) in which a *senatus consultum* is coupled with the *Lex Terentia Cassia*. Here the reference is rather to the decree concerned with the purchase of corn for the purposes of the *annona* which was necessary in order that the law might become operative. Nor can we follow M. Carcopino in taking *municipia* in iii. 76, 175 to be used for *decumani*. The contracts in question do not concern *decumae*, and the machinery employed was no doubt different.

The Platonism of Philo Judaeus. By THOMAS H. BILLINGS. Pp. viii+106. Chicago: The University of Chicago Press, 1919. \$1.00.

This book is a careful study of the influence of Plato's thought and language upon Philo Judaeus. Prof. Billings opens with an interesting survey of the history of Philonic interpretation. Until the seventeenth century, on the authority of the saying quoted by Jerome, *ἡ φιλοσοφία ἀληθινή ἡ Πλάτωνος φιλοσοφία*, Philo was almost universally regarded as a Platonist; and, thanks mainly to Eusebius, he was also thought to have been a Christian. But in 1644 Dionysius Petavius, while agreeing that Plato and Philo were alike, argued that both were unchristian, because they subordinated the second person of the Trinity; while a few years later Alixius 'seems to take it for granted that Platonism and Christianity are two different and incompatible things,'—an opinion which must horrify Dr. Inge. In 1693 Fabricius published the first disinterested study of Philo's Platonism. His work was continued by the Cambridge Platonists and Meisheim, the last of whom emphasised the eclecticism of Philo, of which much has been made by later writers. Prof. Billings, while careful to point out Stoic and Peripatetic influences in Philo, strongly champions his Platonic orthodoxy; and, after reading his thesis, one feels that Prof. Billings is right. His view of Platonism is in the main that of Prof. Shorey, a safe guide, though many English scholars would not agree with him in details. We are glad to note that Prof. Billings refuses to derive the 'mysticism' of Philo from Pseudo-Dionysius, in regard to whom faith tends to outrun knowledge.

One naturally turns to what Prof. Billings has to say about the Logos doctrine. Philo in some passages includes the Logos among souls and therefore treats it as a 'person.' Zeller maintained that for Philo the Logos, as transcendent, was personal, as immanent, impersonal. Prof. Billings agrees, but holds that it is only 'with conscious use of metaphor and myth that Philo speaks of the Logos and Logoi as personal.' This is difficult to prove; but even if Philo is equally serious in both ways of speaking, his inconsistency is no worse than that of other philosophers who have amused themselves by trying to reconcile the irreconcilable concepts of transcendence and immanence. It is noteworthy that even Plato, it seems, personified the *Ideas*, calling them gods in *Timaeus* 37 c, a passage which puzzled Mr. Archer-Hind, but which need cause no surprise in view of the later history of the *Ideas*, which in Platonism definitely become spirits. As Prof. Billings says of Philo's Logoi, 'under the influence of the religious imagination they are hypostasized and endowed with personality. But they remain thoughts of God.' Stoic influence is apparent in Philo's doctrine of the Logos. Prof. Billings does not deny his use of Stoic expressions in this connexion, but argues that they are used in a sense manifestly not Stoic. Philo's Logos was not contaminated with Stoic materialism, nor did it exhaust the divine nature, as the Logos of the Stoics did. Here Prof. Billings seems to have made out his case, as in other points where Philo has been accused of materialism. In Philo's *alikes* Prof. Billings can find little that is not Platonic or a

legitimate development of Plato's teaching. He thinks, however, that Philo stresses the value of moral effort for its own sake more strongly than Plato, for whom the intellect was the supreme thing. Certainly Plato sometimes makes his readers feel a little too acutely that salvation is only possible through philosophy and, what is more, philosophy of the Platonic brand. The last chapter of the book is a study of the correspondences between Philo's and Plato's phraseology. Here, as throughout the book, copious references are given. Prof. Billings deserves the thanks of all who are interested in the later development of Greek thought, for a sober, sensible and well written piece of work.

J. H. S.

A Handbook of Attic Red-Figured Vases, Signed by or Attributed to the Various Masters of the Sixth and Fifth Centuries B.C. Vol. II.
By JOSEPH CLARK HOPPIN, Cambridge, Mass.: Harvard University Press, 1919.

The first volume of the Handbook was published earlier in 1910; the second and last volume has now appeared, and it remains for us to acknowledge our very great obligation to the author. We are indebted to him for what is, in effect, a dictionary of red-figure pottery and painters, for a reliable account of all vases 'signed or attributed,' with brief particulars and complete references, and for a collection of illustrations of most signed vases. That is, we have been given in convenient form the data for future study and a guide to what has been done in the past so far as the authorship of Greek red-figure vases is concerned. Any branch of archaeology possessing records such as these is at once placed on a different and firmer footing: our consolation for having worked so long and so painfully without them is that, since the most vital additions to our knowledge of the subject have been made during the last few years, an earlier publication would not have included them.

The requirements of a book of this kind are, in the first place, accuracy and completeness. To attain either under present conditions is no easy matter; but infinite care has been taken to ascertain the description and whereabouts of each vase, and to verify or correct its references. It was not possible, unfortunately, to obtain photographs or drawings of every signed vase, but it is already much to have the illustrations side by side, and to possess a certain number that are new.

In the second place, a handbook dealing with vase painters requires a good method of classification. We referred, in the *J.H.S.* for last year, to the one drawback of Dr. Hoppin's method; namely, that the list of vases by an anonymous painter does not include those signed by a potter. For instance, the amphora by the Menon Painter with Andokides' signature, the cups by the Telephos Painter with the signature of Hioron. They are, indeed, connected with their painter by a note on 'other attributions,' but their absence from the list gives an inadequate idea of his activity, the more so because they are often among his more important works and more probable attributions. They need not, of course, be described twice: to number them with a cross reference would be sufficient.

With regard to Vol. II in particular: the London Sleep and Death Painter deserves a place to himself, since, though associated mainly with Pamphaios, he painted also for Nikosthenes. The Hermaios Painter, according to Beazley, painted a vase for Chachrylion: this was noticed in the first volume, but in the second somehow overlooked. Not the least useful part of the book is the museum index, giving the vases by the various artists in each, and possibly worthy of a separate publication for the benefit of students travelling.

Our great need is now for a book on similar lines dealing with the black-figure period. Here we must choose whether we would rather wait for a fuller account till the period has been mapped out more clearly, or have as soon as may be a publication of all available facts concerning the black-figure masters. There are few who would not vote unconditionally for the latter.

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BRUNSWICK ST., STAMFORD ST., S.E. 1,
AND BUNGAY, SUFFOLK.

Fragment of a papyrus scroll, showing several lines of ancient Greek text. The text is written in a cursive script, likely from the Hellenistic or Roman period. The fragment is heavily damaged, with significant portions missing and the surface showing signs of wear and discoloration. The text is arranged in approximately 10-12 lines, though many are partially obscured by the damage. The script is dense and difficult to decipher in many places due to the fragmentary nature of the document.

PAPYRUS FROM AFRODITO.

[illegible]







THE BOSTON AND LUDOVISI RELIEFS



HERA OF KANATHOS AND THE LUDOVISI THRONE

[PLATE V.]

Of all the interpretations of the Ludovisi throne it is generally agreed that none is entirely convincing. For that reason any new suggestions that I have to bring forward here should only be interpreted as an attempt to indicate a fresh line of investigation that may perhaps lead to a more complete understanding of this most difficult of archaeological problems.

At the outset we are faced with the almost universally accepted view that the subject of the Ludovisi throne is the Birth of Aphrodite, with representatives of the cult or devotees shown on the side panels. Once this is admitted the explanation of the details of scene becomes a matter of purest academical or technical dispute. Similarly, the important corollary follows that the Boston counterpart, whatever we may think of its date or style, represents but other aspects, clearly more complicated, of the Aphrodite cult.

The interpretation that I have to bring forward here, however, by challenging the first and principal assumption, renders me liable to the charge that I am wilfully indulging in that worst of learned vices—the deliberate circulation of startling theories. I should therefore perhaps explain that the interpretation I propose here did not arise from any determined effort on my part to solve the problem of the Ludovisi throne, but rather originated gradually from the correlation of a variety of evidence which reached me quite independently of the main problem.¹

On the site of Tiryns in the Hellenic stratum the remains of a temple of Hera were found during the course of the German excavations of 1909-10. In and round the site a large number of terracotta figures were found. Most of these figures represented the goddess Hera in various forms. There is, however, a large series representing a very peculiar, and in many ways unique, type. The goddess is shown as either seated or standing, crowned and with heavy necklaces. In front of her breast she holds a square cloth. In almost every case the cloth stands clear of the breasts, or perhaps just touches. The artist appears to have made the breasts of separate pellets of clay and added

¹ During the spring of this year I had occasion to visit the Museum at Naples. The terracottas, of which I show photographs below, impressed me at the time as bearing some sort of relation to the Ludovisi throne. A re-reading of Pausanias, coupled with a close examination of the throne early in June,

suggested what this relation might be. I must here express my indebtedness to Mr. A. W. Lawrence of New College, Oxford, for his help and collaboration. It was he who called my attention to the importance of the passage in Pausanias here dealt with (ii. 38, 2).

them to the body. He similarly made the square cloth out of a separate flat piece of clay and attached it to the hands and body. (Fig. 1.) The square cloth is not a part of the garment worn by the figure, and so cannot be intended to be the overfall of a peplos. In each case the cloth stands clear of the figure at each corner and is a clear-cut rectangular piece of fabric.

The question immediately presents itself as to what these figures represent and what is the special meaning and purpose of the square cloth. No evidence as to an explanation is forthcoming from the site itself and we



FIG. 1.—TERRACOTTA FIGURINES OF HERA FROM THE TEMPLE AT TIRYNS.

must look elsewhere. Most of the best examples of this type of figurine belong to the first half of the fifth century; it is, therefore, perhaps not inappropriate to refer to Pindar for passages that may throw light upon their meaning. In the tenth Nemean Ode the poet sings of Hebe:

κατ' Ὀλυμπον
 ἄλοχος Ἥβη τελεία παρὰ μητέρι βαίνοισ' ἔστι
 καλλίστα θεῶν.
 βραχὺ μοι στόμα πάντ' ἀναγῆσασθ', ὅσων Ἀργεῖον ἔχει τέμενος
 μοῖραν ἰσλίων.

Hebe, fairest of goddesses, walketh for ever in Olympus beside her mother Hera, who maketh marriage perfect. My mouth is of small measure

to tell all the story, to wit, all the fair things of which the holy precinct of Argos hath a share.'²

In this passage Pindar clearly refers to the function of Hera as *τελεία*, the goddess of Matrons. In the sixth Olympian Ode he refers to the counterpart of this aspect of the goddess, Hera *παρθένος* or *Παρθενία*.

ἄτρυνον γυνῆ ἐταίρους

Αἰνέα, πρῶτον μὲν Ἥραν Παρθενίαν κελαδῆσαι,

'Now bid thy comrades, Aeneas, first to sound the praises of Hera as the maiden goddess.'

This exhortation is addressed to the people of Stymphalus in Arcadia, a day's journey from Argos.

That these passages refer to two definite cults of Hera as opposed to simple aspects of a literary nature is clear from other evidence. Thus Pausanias states that there was a temple of Hera near Hermione in the Argolid,³ and from Stephanus Byzantinus (*s.v.* Ἐρμῖον) it seems clear that the temple was of Hera Parthenos. In the same way it is clear from the description of Arcadia⁴ in Pausanias that there was there a definite cult of Hera *τελεία* such as is suggested by the passage from Pindar quoted above. Finally, to make it beyond question that these were definite cults, Pausanias mentions the temple of Hera *τελεία* at Plataea,⁵ in which were a statue of a standing figure of Hera by Peixiteles and a seated figure of Hera *νυμφενομένη* by Callimachus.

Unfortunately we have no representation in art that can be definitely identified either as Hera *τελεία* or as Hera *παρθένος*, unless we identify the Hera in the metope from Selinus as Hera *τελεία* or *νυμφενομένη*.

In trying to identify the Hera of the Tiryns figures we are therefore driven to adopt the rather unsatisfactory methods of *a priori* reasoning to a certain extent. The fact that the figures in every case bear a cloth in front of the breasts and that they all seem to represent a fully grown and stately woman, seated or standing in a dignified attitude, suggests that the cloth, which is the centre of interest of the figures, is emblematic of matronhood. Immaturity might well be nude, maturity should be garbed. The fact that behind the cloth the breasts are nude only serves to emphasise the distinction. In a word the cloth, which is clearly the distinguishing cult-sign in these statuettes, is the symbol of Hera *τελεία* as opposed to Hera *παρθένος*, whom we may imagine as nude or very lightly clad, and, above all, with her breasts uncovered. The figurines thus represent Hera *τελεία*, whose worship we know to have been popular in neighbouring Stymphalus side by side with that of Hera *παρθένος*.

² From Sir John Sandys' translation. For the meaning of *τελεία* see *Class. Rev.* xv, p. 446. Mr. Bayfield denies that the word *τελεία* in any way connotes 'marriage' though he admits that 'Hera *τελεία* was to Greeks the goddess of marriage rites. Sir John Sandys is clearly not in agreement with him in regard

to the meaning of *τελεία*. For another reference to 'Hera *τελεία* in the fifth century see Aeschylus, *Eum.* 214.

³ Paus. ii, 36.

⁴ *Id.* viii, 22, 2.

⁵ *Id.* ix, 2, 3.

So much for the figures and the square cloth which is their distinguishing characteristic.⁶

Pausanias, in his description of the Argolid,⁷ says that at Nauplia there are harbours and a temple of Poseidon, and 'a spring called Kanathos where, so say the Argives, Hera bathes every year and, by so doing, becomes a maiden; it is this story which is of the secrets connected with the rites they perform to Hera.' However much more he may know about this story and the rites he leaves unspoken, in respect for the secrecy of the cult. It is obvious, nevertheless, that this particular cult must have been of the utmost importance in the worship of Hera on account of its fundamental nature and because it seems to be a third type of cult in which the other cults of Hera *velata* and Hera *παρθένος*, sufficiently important in themselves, were to a certain extent combined. The paucity of records concerning it is explained, as Pausanias says, by the fact that it is a *λόγος τῶν ἀπορρήτων*.

We can connect these two groups of facts, then, in this way: At Tiryns we find a cult of Hera which emphasises her qualities of matron in clearly marked and evidently intentional distinction from her qualities as maiden. Within a mile of Tiryns was a sacred spring in which Hera the matron was transformed each year into Hera the maiden.

What, then, is the bearing of the argument upon the Ludovisi throne?

In the light of the evidence set forth above I put forward the suggestion that in the central panel of the throne we have a representation of Hera being raised from the spring of Kanathos by two attendants, priestesses or maidens. Before being let down into the waters she had upon her breast the symbolic cloth of matronhood of the same type as that worn by the Hera of the Tiryns sanctuary. On emerging from the spring the attendants let down the cloth and disclosed the breasts, as though to say, 'This is Hera the maiden that was Hera the matron.' The fact that Hera is not actually nude seems to be a concession to tradition, according to which, in art, Hera is never nude. The pebble-strewn ground upon which the attendants are standing is far more suited to the banks of a spring than to a Greek seashore, which would be better typified by sand or rocks.

In regard to the detail of the figures and drapery one or two points need discussion. The cloth which is being lowered from the breasts is clearly of thick and heavy material. So too are the cloths held up by the Hera figures from Tiryns. The hands of the Hera go under the further arms of the attendant and grip the outer side of their shoulders in the same way as their hands grip the outer sides of Hera's shoulders. The breasts of the Hera would thus naturally be drawn widely apart by the strain, so that it seems unwise to attribute this wide spacing of the breasts entirely to the archaism of the sculpture. The thin gauze-like chiton of Hera clings to her figure because she has emerged from the water.

Once this interpretation is adopted the figures on the side panels

⁶ Some of these figures, such as that shown in Fig. 1 (left), seem to represent the *hesas* which Peiraios set up at Tiryns and which was

seen later by Pausanias at the Heraeum (ii. 17, 5).

⁷ *Paus.* ii. 38, 2.

present no special difficulties. They clearly represent either votaries or figures typical of Hera *τελεια* and Hera *παρθένος*. We need not press too closely for a decision any more than we need decide that the Maidens of the Acropolis at Athens are votaries or priestesses or merely suitable offerings to Athena. They were maiden statues offered to a maiden goddess,⁸ and our figures of the panels are matron and maiden figures characteristic of the two aspects of Hera.

Ovid⁹ in his account of the Falerian festival to Juno, which was copied from that at Argos, describes the procession in honour of the goddess:

'ubi praesonit solemnī tibia cantu.'

The flute was thus not unsuited to votaries of Hera. Our little maid of the side panel, piping solemnly to herself, can hardly be more than seventeen years of age, and the suggestion of Mr. Caskey¹⁰ and others that she is a young courtesan seems as groundless as it is unfair to the artist of the throne. Mr. Caskey's argument that his interpretation as to her humble origin and calling and, as he puts it, her 'lower social stratum,' is evident from the thickness of her wrists and ankles, which, he says, compare unfavourably with those of the draped lady of the other panel, is indeed remarkable; it belongs, I think, to a realm of sculptural snobbery as far removed from the delicate genius of the 'Precursors' as it should be from modern criticism. It has the additional demerit of being untrue in point of fact.

The appropriateness of the interpretation of the lady of the other panel as a figure typical of Hera *τελεια* or *συμφενομένη*, seems to me to fit consistently into the interpretation of the monument as a whole. The garments she wears are closely paralleled by the garments of the Hera on the metope from Selinus. Her occupation as a burner of incense in no way conflicts with her identification as a matron typical of the cult of Hera *τελεια*. The Maidens of the Acropolis at Athens bear pomegranates and doves as votaries would do, and yet they are neither votaries nor yet priestesses. There is a certain confusion of idea or absence of clear definition that makes them at once votaries and typical and suitable offerings in themselves. So too with the maid and matron of the Ludovisi relief who are each engaged in occupations characteristic of the Goddess *τελεια* and *παρθένος*.

At this point critics will say, 'But what about the Boston counterpart?'¹¹ How does it fit in, if it does at all, to this interpretation? I can only echo their doubt. It apparently does not fit in. This is perhaps a serious flaw in my interpretation. But I have merely let my evidence carry me to my conclusion. I have tried hard not to let preconceived theories squeeze the evidence into a Procrustean bed of theory so that it will fit well. I can,

⁸ See G. Dickins, *Acropolis Museum Catalogue*, I, p. 33.

⁹ *Amor.* iii. 15.

¹⁰ *A.J.A.*, 1918, p. 118.

¹¹ One objection to the attribution of the Boston throne to the early fifth century that has not, I think, been noted before is that the

wing feathers of the Eros are not of an early type but resemble rather the wing feathers from the Parthenon pediment or from the Nike Temple balustrade. (Cf. wing fragments nos. 176, 208, 2472-4, 2478-80 in the Acropolis museum and see *Pracht in Ath. Myth.* 1908, Pl. II. 10.)

therefore, only regret that the Boston counterpart remains without an interpretation similar to that of the Ludovisi throne. But this at once suggests that to call it a 'counterpart' is in itself a preconceived theory. Is it essential, because it is architecturally and structurally similar to the Ludovisi throne, to assume that it is necessarily a part of that throne? That in itself compels those who would interpret the one to accommodate their interpretation to suit the other; and that is bad critical method.

S. CASSON.

TELOKLES AND THE ATHENIAN ARCHONS OF 288/7-262/1 B.C.

THE object of this article is to examine the latest arrangement of the Athenian archons of this period, made by Dr. A. C. Johnson.¹ Johnson's studies in third-century chronology begin earlier than 288/7 and extend far beyond 262/1, and embrace Delphi as well as Athens; but the period here examined is obscure and difficult, and can be treated by itself, since everyone agrees that there was a break in the secretary rotation in or following 262/1. Recognising that I have proved the absolute impossibility of placing Diokles (the fall of Demetrios) anywhere but in 288/7, and taking this therefore as a starting-point, Johnson has constructed an archon list with an unbroken secretary rotation from 288/7 to 262/1, which exhibits various new features and furnishes a number of facts which were new when put forward, some of these are permanent acquisitions. My excuse for examining the period afresh is a recent inscription, not yet utilised (so far as I know), which supplies very important data. For Johnson's list has one obviously weak point; he has a theory that from 279/8 to 268/7 inclusive Athens was subject to Antigonos, and the government pro-Macedonian without a break, and that consequently no archon who belongs to a Nationalist government can fall in this period; and the inscription I refer to begins by making this theory untenable; and ends, so far as I see, by making an unbroken secretary rotation untenable also. Incidentally, it seems practically conclusive against Pontow's dating of the Soteria.

I give Johnson's list for reference, adding the numbers of those secretary tribes only which he regards as ascertained. For convenience of reference I shall call the portion 288/7-280/79 section one, 279/8-268/7 section two, and the rest (Chremonidean war) section three. The archons prior to 262/1 fixed by literary tradition to definite Olympiad years are Anaxikrates, Demokles, and Pytharatos; Diognetos is always, and Gorgias ought to be, regarded as fixed. It is unfortunate that the secretary tribes of *all* the

¹ The articles here material, in whole or in part, are: 'Attic archons from 294-262 B.C.," *Class. Phil.* 9 (1914), 248; 'Notes on Attic inscriptions,' *ib.*, 417; 'Studies in the financial administration of Athens,' *Am. Journ. Phil.*

36 (1915), 424; 'The archon Philokrates,' *Class. Phil.* 10 (1915), 457; 'Problems in Delphian chronology,' *Am. Journ. Phil.* 39 (1918), 145; 'The archon Lythioides,' *Class. Phil.* 13 (1918), 209.

fixed archons are unknown; Diognetos IV. in Johnson's original list (*Class. Phil.* 9, 277) is a misprint.

SECTION 1.		SECTION 2.		SECTION 3.	
288/7	Diokles IV.	279/8	Anaxikrates	267/6	Peithidemios
287/6	Diotimios V.	278/7	Demokles	266/5	Philokrates II.
286/5	Isaios	277/6	— <i>Isaios</i>	265/4	Lysitheides
285/4	Euthios VII.	276/5	Enboulos	264/3	Diognetos
284/3	Gorgias	275/4	Telokles	263/2	Glaukippos V.
283/2	Ouirios IX.	274/3	Thymochares	262/1	(Antipatros
282/1	Sosistratos	273/2	Polyeuktos VII.		Arrheneides
281/0	Menekles XI.	272/1	Hieron VIII.		
280/79	Nikias Otryneus	271/0	Pytharatos		
	XII.	270/69	Philoneros		
		269/8	Theophilos XI.		
		268/7	<i>I.G.</i> ii.2 702, 703		
			XII.		

The inscription referred to is a proxeny decree from Orchomenos in Arcadia¹ for three Athenian ambassadors, *Κάλλιστος Μοιροκλέους* (deme lost), [*Ἀ*]ο[*σ*]ρείδης Μνησιθέου *Ἀ*[αμπτρία], [*Γ*]λαίκε[ων] Ἐστιακλέους Ἀιθαλίδου. The editors rightly suppose that the object of the embassy was to prepare the coalition against Antigonos Gonatas prior to the Chremonidean war; (this is certain, for, as M. P. Roussel has pointed out, the appointment of Kallippos as one of the envoys for the purpose is elsewhere recorded²); but they have not considered the importance of the decree for the history of parties at Athens. For in 279/8 Kallippos son of Moirokles was strategos, and commanded the Athenian troops at Thermopylae³; and the Orchomenos decree shows that he was a Nationalist, and of the more extreme wing; he is not merely associated with Chremonides' brother Glaukon, whose record is so well known, but is apparently a more important person, as his name comes first. If an extreme Nationalist was strategos in 279/8, it is quite certain that in that year Athens was not subject to Antigonos or governed by the pro-Macedonian party; she was free. It agrees with this that Kallippos was commander-in-chief of all the Greeks at Thermopylae;⁴ for one cannot imagine the Aetolians placing themselves under the command of a subject of Antigonos. Incidentally, the decree furnishes good (though not conclusive) evidence that Boeotia also was free that year; anyone governing for Antigonos in Boeotia could never have placed the Boeotian troops under the command of an Athenian Nationalist.

¹ Published by MM. A. Plassart and G. Blum, *B.C.H.* 38 (1914-15) p. 151.

² *B.C.H.* 29 (1915) p. 125. The appointment of 'Kallippos of Eleusis' is recorded *I.G.* ii.2 687, a fragment which really belongs to *I.G.* ii.2 686 (Chremonides' decree), and is so

printed *Syll.* 434/5.

³ Paus. 10, 20, 5.

⁴ Paus. 10, 20, 5: καὶ ἡγεμονίας αὐτῶν (the Athenians) κατ' ἄλυσιν εἶχεν τὰ ἑσχαίον. Pausanias (1, 3, 5) saw a picture of Kallippos at Athens, which may have recorded the fact.

But the Orchomenos decree takes us further than this. The second envoy, Aristekles of Lamprai, was strategos in the year of Telokles;⁶ therefore Telokles' year also saw a Nationalist government at Athens. Consequently Telokles cannot be placed in 275/4, one of the three years of this decade in which it is certain that Antigonos was ruling Athens, and no reason can be shown why he should come between the pro-Macedonian years of Euboulos and Polyenktes. But displacing Telokles also displaces Thymokhares; and then the whole of section two is in the melting-pot again.

I will leave the problem of Telokles to the end, and begin with the first section. For Athens fell in the early spring of Nikias Otryneus' year and a pro-Macedonian government came into power, as shown by the change of agonothetes; and if that be in 279, Athens could hardly be nationalist again by the time of the 279 elections; it is theoretically possible, of course, but practically most unlikely that the Nationalists could regain power within two or three months of concluding an unsuccessful war. And Nikias in 280/79 will not square with the history of these years as we now know it.

The first section, as Johnson has arranged it, assumes that Athens was at war with Antigonos, more or less, from Diokles to Nikias. I assumed this before myself. But I now think it can be shown to be wrong; there were *two* wars, with an interval of peace. This is the proper and natural interpretation of the decree for Strombichos.⁷ This decree first gives the capture of the Mousaion. Then it says *καὶ συν[ε]λεσθέντων τῶν πόλει τῶν πρ[α]γματιῶν καὶ τὰς λοιπὰς χρεῖας ἀπροφασίστως παρεχόμενος δια[ε]τέλκεν καὶ διαμερίσκειν ἐν τῇ τοῦ δήμου εὐ[ροίαι]*. What business had Athens finished which left this professional soldier with nothing to do but to remain 'in the goodwill of the people'? Obviously, the business of beating Antigonos; the war was over and Athens victorious. Then the decree continues *[καὶ] τοῦ πολέμου γενομένου* Strombichos fought well, etc. What was *the* war which had subsequently broken out? The war which was present to the mover of the decree in Nikias' year, the war in which he was engaged; that of Menekles' and Nikias' years, a new war.

Dates.—The first war, that of Diokles' and Diotimos' years, went on into Isaios' year, 286/5; for Philodemos gives a fragment of a letter written that year by some unknown writer, which runs *εἰθ' [ὅ]σπερ τοὺς*

⁶ *I.G.* II. 1158; [*Ἀριστέκλῃος* ἀμπεργίας. Of course 'Kamandis' restoration was conjectural at the time, and though Koehler followed it in *I.G.* as 'probable', he also suggested the possibility of *ε.σ.* [*Ἀριστέκλῃος*] εἰσέως. But I think no one will doubt that the Orchomenos decree renders [*Ἀριστέκλῃος*] certain; and the editors of that decree unhesitatingly identify the two. If Aristokles was important enough to come before Glaukon, he must at least have been strategos. I may

add that the name Aristokles does not occur in any other deme beginning with *α*, (*Leukomea*, *Lousia*, *Lakinda*), and is the only name in *-ειδης* known in Lamprai, where it occurs again both in the 4th and the 2nd centuries (*Prosop. Att.* 1709, 1710). *Lakratioides* is a very rare name at Athens; the *P.A.* gives five cases only, two 5th century, one middle 4th, two late 2nd (both deme Ikaria).

⁷ *I.G.* II. 806, 807; two copies.

ἐχθίστοισι καταλίσσειν] *Macedōnais*].⁸ It ended in that year in time for Philippides, in the same year, to distribute corn and wine to the people in honour of the freedom of Athens, and to celebrate his *ἐπιθετοῦ ἀγῶνα* for Demeter and Kore.⁹ As Johnson points out, (I have followed up his hint), there is nothing to show that Athens was at war in Euthios' year 285/4.¹⁰ The first war, then, ended in 286/5. Why? Because Antigonos was waging this war as his father's governor, and as part of Demetrios' war against Lysimachos, Athens' helper. With Demetrios' captivity in spring 285 the basis on which Antigonos acted was gone; he was no longer Demetrios' governor, and Demetrios was no longer at war; but neither did he consider himself king so long as Demetrios lived.¹¹ He may or may not have made a formal peace with Athens; but Athens considered herself victorious as she was, and marked the event by the decree of Euthios' year for Lysimachos' friend Philippides.

Peace probably lasted through 284. Perhaps something may be gathered as to this from the choragic inscriptions of the Apollonia at Delos.¹² Taking only the years of Nationalist government at Athens during our period, the number of Athenians among the artists appearing was: four in 284; three in 279; one apiece in 282, 280, 265, 263. (In 265 Telestes is an Athenian though not so noted.) That is, in the years 282, 265, 263, when Athens was certainly at war with Antigonos, one only; in 279, when she was certainly at peace with him, three. Therefore 284, with four, should be a peace year, and incidentally 280, with one, a war year. (I shall come to 280 later.)

If the end of the first war depended on Demetrios, so probably did the end of the peace. In spring 283 Demetrios died and Antigonos' position became definite. He had to regain his father's dominions. He could not attack Macedonia, for Lysimachos was too strong; he therefore attacked the next most important place, Athens. The two known years of this war are

⁸ *καὶ τὰς πόλεις αὐτῶν*, P. II. i. vii. c. 3, 7 = Usener, *Epistoca*, 133.

⁹ *I.G.* ii. 657.

¹⁰ *Class. Phil.* 9, 264.

¹¹ It seems certain, and is now generally agreed, that Antigonos only took the royal title in 284/3 and not in 286/5 (evidence in my *Antigonos Gonatas*, 112 n. 3). The Philochoros fragment published in 1912 by A. Mayer (*Philol.* 71, p. 226) does not bear on this point; but Kolbe (*Philol.* 74, 1917, p. 58; written before the war though published 1919) has attempted to found on it an argument for dating Euthios 284/3, drawn from hypothetical theories as to who it was Apollodoros was refuting and what it was they said, one of which is not even correct as mathematics. What Apollodoros says is quite clear: Antigonos could not have written the (forged) letter to Zeno in Euthios' year, because in that year he was, not only not king of Macedonia,

but not even king at all, *ἐπὶ τῷ 3*) *εἰς τὴν 3* *ὅπως βασιλεύσας* (sic), i.e. Euthios comes before 284/3 (which date Kolbe accepts for Antigonos' assumption of the royal title); and he could not have written it in *Δυναστείας* year because (breaks off; obviously it ran) in that year he was not king of Macedonia either, he had merely seized a bit of the country, *ἐπὶ τῷ 3* *ὅπως βασιλεύσας* (sic) *καὶ αὐτὸς βασιλεύσας*. Of course my note on p. 478 of *Antigonos Gonatas* is wrong, as Kolbe points out; but that does not help him. How he reconciles Euthios in 284/3 with his acceptance of 277/6 for Polyenktes (see post), which would involve a *five years* break in the secretary rotation, I do not know; I may have missed some article.

¹² *I.G.* xl. 2: 105, 106, 107, 108, 111, 113. Nos. 106 and 112 are broken away, and 110 is a pro-Macedonian year (268), in which no Athenian appears.

Menekles and Nikias. Johnson put them in 281/0 and 280/79 solely on the secretary cycle. But Menekles, a full war year, ought to come where he was before, 283/2, because of Demetrios' death, *unless* there is some other war archon for 283/2. Let us look at the intermediate archons of section one.

Gorgias.—His date is fixed by Plutarch, *X. Orat. Vit.* 847 D, to ten years before Pytharatos, who is fixed to 271/0 by Diogenes Laertius. It has become a habit to say that he was either ten or fourteen years before Pytharatos, but this is not accurate. All the MSS. of Plutarch but one read *δεκάτῳ*; one, Parisinus 1672, gives *δεκάτῳ Δ*, for which Beloch conjectured *ἰδ'*. If, therefore, we follow tradition we are bound to put Gorgias in 280/79; if we put him in 284/3, we are merely following a conjecture, and a conjecture as to which we cannot even explain how it came to be converted into our MS. text. The proper course to take is not in doubt. The fact of Gorgias' year is Demochares' decree for Demosthenes; this makes it a Nationalist year, and Johnson thinks a war year. This may be doubted; but anyhow, we have seen that 284/3 was probably not a war year, Demetrios being alive. But 280/79 probably was. As Athens was Nationalist by the time of the elections for 279/8, she must have revolted in 280/79, or earlier. Now in spring 280 Keraunos defeated Antigonos, and nearly all Greece rose against him—*omnes ferme Graeciae civitates*, says Justin (25. 1. 4). These words cannot refer *merely* to the kind of Peloponnesian League which Sparta formed in 280, as she had done before and was to do again; if Athens and Boeotia held aloof, while Aetolia was hostile, how could even Justin say 'nearly all the Greek states'? Athens, then, revolted in spring or summer 280; and the success of this (first) revolution against Antipatros' grandson was marked by the decree for Demosthenes, Antipatros' victim. The Delian choragic inscriptions (*ante*) also seem to show 280 was a war year.

Sosistratos; or, rather, *I.G.* ii.¹ 673 (three decrees for Komeas, Athenian hipparch on Lemnos), for Sosistratos is a mere name, with only prosopographic evidence, and can come anywhere in the period under consideration. Johnson conjectured Sosistratos as the archon-name for this inscription, instead of Anaxikrates, as in *I.G.* ii.², because there is a board of administration, i.e. a Nationalist government, and he held that there could not have been a Nationalist government in Anaxikrates' year 279/8. We now know from the Orochomenos decree that, as a fact, there was. But is Sosistratos correct on the merits of the case? Johnson admits that it is difficult to date these decrees in 282/1, as they show good relations between Seleukos and Lysimachos' friend Athens; he supposes that Athens went over to Seleukos before Koroupedion. But it is difficult to credit this without evidence, for in 282 Seleukos was courting Athens' enemy Antigonos (return of Demetrios' ashes);¹² and the idea that friendly relations between Athens and Lemnos must have ended by 280, when

¹² For the date, *Antigonos Tennesias*, p. 122.

Ptolemy II, consolidated his power in the Aegean, seems unfounded, for there is no trace anywhere, so far as I know, that any relations between Ptolemy II. and Lemnos ever existed. The tradition is clear that Seleukos acquired Lemnos after Koronpedion and gave it to Athens, the actual transfer being made after his death (which occurred late in 281) by Antiochos,¹⁴ and the third decree on this stone, which mentions Seleukos, does not show that he was alive at the time, for the form of the reference is to a past event. *I.G.* ii.² 673 is in its proper place in 279/8, the first (the Athenian) decree on the stone marking the restoration of the old relations between Athens and her one-time possession; and Sosistratos vanishes from this section.

Ouirios.—Now that we have the two decrees for the Tenians, *I.G.* II² 660, printed together instead of in fragments, we see at once that the second, the one of Ourios' year, in the phrase *σπαρτενοπέρις κ.τ.λ.*, is only quoting the first, consequently there was no military expedition by Tenos to the aid of Athens in Ourios' year, as I formerly thought. *Mea culpa*. All that happened was a Tenian embassy to Athens to obtain confirmation of the 4th century grant of *ισοτέλεια* to Tenos: a thing Ptolemy would hardly have vetoed even had Antigonos been ruling Athens. Probably however Ourios still comes between Euthios and Menekles, during the peace; for he precedes Euboulos, and on his secretary there is nowhere later he can go.

With Gorgias 280/79—and this ought to be treated as a fixed point of the literary tradition—Menekles and Nikias must go backward; and as we have now only one archon between Euthios and Menekles, and his is apparently not a war year, Menekles should fall in 283/2, where he ought to be on account of Demetrios' death. And the putting back of Menekles and Nikias is confirmed by the history of the time, which, as I see it, forbids us to suppose that Antigonos took Athens in spring 279. The point here is the mysterious war between Antigonos and Antiochos, heretofore most difficult to place,¹⁵ which can now be straightened out by the aid of the recent fragment of Philodemos.¹⁶ Philodemos tells us (1) that Antigonos made an abortive attempt on Macedonia before Lysimacheia; (2) that this attempt was preceded by (or contemporaneous with) his treaty with Antiochos; and (3) that it ended in his expulsion from Macedonia and his taking refuge in Asia (with Antiochos). His war with Antiochos then comes *before* the attempt on Macedonia. This attempt was already known from Memnon,¹⁷ to whom we ought to have paid more attention, as he is in effect Nymphis, i.e. contemporary evidence. The other known chronological facts are that

¹⁴ Philochoros *op. Ath.* vi. 2547, correctly interpreted by Ferguson, *Hellenistic Athens*, p. 135.

¹⁵ In *Antiquorum Gemas* I carried this war on till Lysimacheia, much too late.

¹⁶ See note 11. The passage here material runs *περὶ τοῦ ἀποδείξαι τὰς ἐν τῇ ἐπιδόξει* 'at a public (a) < πρ>—τοῦτο δ' ἐστὶν (ἀποδῶν) ἀποδοῦναι τῇ Μασσιδονίᾳ ἐκείνην τῇ (ἀπὸ αὐτῆς) ἡλικίᾳ'.

followed by Lysimacheia. There is little doubt that the unknown form (ἀποδῶν) is wrong, whether it conceals *Μασ* < αὐ>—*ἐκείνη* (Johnson)—the sense required—or some local name. *ἀποδείξαι* should of course be Greek *αἰεῖν*.

¹⁷ Memnon 14. *Προέπειον ἀποδοῦναι* (Antigonos) τῇ Μασσιδονίᾳ ἐκείνην ἀπὸ αὐτῆς.

the war between the two kings lasted *χρόνον συνεχὲς*¹⁸ (i.e. presumably more than one season), and probably began in Keraunos' life time, i.e. in 280.¹⁹ Mayer's historical commentary on this part of the fragment is sadly astray; it was Johnson who saw that αἱ σπονδαί (note the article) must be the treaty between Antigonos and Antiochos—the treaty of the time, for it marked the end of Demetrios' theories of Asiatic conquest and kept the peace between Europe and Asia for generations. This is the key of the thing; and I think I can confirm it. Aratos of Soloi wrote two hymna. The one, ἐπὶ Πάρα, was long ago recognised as the celebration of Lysimacheia, probably written for Antigonos' marriage. The other hymn, Σπονδοφόρους, the treaty-bearers would also therefore most naturally belong to his time as Court poet; we can see now that it must have celebrated the treaty, and must also have been written for the marriage, the bride being a Seleukid princess and the marriage doubtless a term of the treaty.²⁰

The events then are as follows:—Spring 280: Keraunos defeats Antigonos at sea, and 'nearly all the Greek states' rise; Antiochos is supporting Sparta and her League against Antigonos, and is getting roughly handled in his war with the Northern League, who are supported by Antigonos; the two kings are therefore at war, though they never meet. Very early in 279²¹ the Gauls enter Macedonia, and kill Keraunos; Antigonos and Nikomedes that spring open their campaign against Antiochos in Asia, who after Keraunos' death allies himself with Apollodoros. Parts of Macedonia are occupied by various pretenders, Meleagros, Etesias, etc., who may be local rather than successive. Late summer or autumn, 279, treaty between Antigonos and Antiochos (before Thermopylae). Antigonos occupies part of Macedonia, autumn 279 or spring 278 (anyhow Anaxikrates' year, see note 11). Γαλατῶν ἀπώλεια very late in 279, perhaps December²². In 278 or spring 277 Antigonos ἐκπίπτει Μακεδονίας, and retires to the Dardanelles. Lysimacheia 277. I cannot reconcile with this chronology a supposition that Antigonos took Athens in early spring 279 and set up a pro-Macedonian government—for a couple of months. It may be just possible *on paper* to fit it in; but I have previously shown elsewhere how weak Antigonos was in resources at

¹⁸ Memnon 18.

¹⁹ This seems to be the meaning of Justin 25, 1, 1, but it is very confused.

²⁰ It can have nothing to do with the σπονδοφόροι who announced the religious truce at a festival, though the hymn may have treated its subject by analogy to them. A somewhat similar use of σπονδοφόροι, = ἄνθρωποι σπονδῶν ἄνθρωποι, occurs Ar. Ach. 216, 297.

²¹ Polyb. 1, 6, 3 puts the Γαλατῶν σποδία in the year after Pyrrhos crossed to Italy, i.e. in 280/79.

²² To get room, Johnson has to lengthen out the whole period from Koroupedion to Lysimacheia at both ends. He gets the Gallic invasion too late (see previous note;

Pausanias puts only the ἀπώλεια Anaxikrates' year); and he makes Delphi May 278, on the ground that the Koan decree (SpL. 398) was not passed till September 278. I think this is misconceived. The decree was not passed in Panmos; the envoys were instructed to sacrifice in Panmos; and Panmos at Kos may be a good deal earlier than September; in many Dorian states it was May-June. The decree could have been passed any time in spring or summer 278; and it is certain that if the defeat of the Gauls was in November or December it would not be known at Kos till March-April. News rarely crossed the sea in winter.

this time. Fortunately, if we date Gorgias in accordance with the MSS. tradition, we have no need to fit it in; everything falls into its place, except the secretary-cycle as from Diokles.

For reasons that will appear, we cannot consider the second section and the problem of Telokles till we have considered the third, which we will take next.

Johnson has definitely proved that *Glaukippos* belongs to the Chremonidean war; a fact gained. *Lysitheides* however is not quite in the same category. It has been made clear that his is a Nationalist year, (*I.G.* ii² 689) and that he must come as close to Hieron as possible;²⁰ he can therefore belong to any Nationalist period of government, provided it be near Hieron's year; for instance, 277/6. Johnson placed him in the Chremonidean war because he believed that no Nationalist year could come in the period 279/8-268/7, a reason no longer valid.

Next, *Peithidemos*. His date depends on that of Areus' death in the second season of the war. Almost everyone (myself included) has for many years placed Peithidemos in 266/5, with E. Meyer and Lehmann-Haupt dissenting and arguing for 267/6. I believe now that Johnson is almost certainly right in adopting 267/6, but not for the reason he gives; and as I have never seen even a moderately clear statement of the position, perhaps I may be pardoned if I attempt to give one. If anyone will take out Diodoros' figures for the deaths of the Agiad kings of Sparta, he will see that Diodoros uses *extensive* reckoning throughout; I need not give a table, for there is a correct one in E. Meyer's *Forschungen*, ii 510, which I have checked; Diodoros therefore put Areus' death (the passage is lost) in the Olympiad year 265/4, beyond any question. Was this the true year? Meyer gives a second table (p. 511), which shows the death of each Agiad king one (Olympiad) year earlier than Diodoros does, with Areus' death 266/5; this table, he says, is correct 'wenn wir . . . abweichend von Diodor das letzte Jahr einer Regierung als Todesjahr des betreffenden Herrschers betrachten.' But we have no right to make such an arbitrary supposition. It does not even work; for Kleombrotos was killed at Leuktra 5 Hekatombaion 371, i.e. in the Olympiad year 371/0 as Diodoros says and not in 372/1 as Meyer says.²¹ Meyer accordingly had to tack on a second theory to account for Kleombrotos, — 'cycle and epicycle scribbled o'er': — we must reckon the years as Spartan ephor-years, (which began in the autumn), and not as Olympiad years. All this is hopeless; and the only correct course is to quit theorising and see if we can check any of Diodoros' dates *aliunde*. For Kleombrotos, as we have seen, Diodoros is right. Agesipolis died in the campaigning season of 380 of a sunstroke suffered *κατὰ θέρος ἄσπευ*,²² i.e. almost certainly July or August, and therefore almost certainly in the Olympiad year 380/79, as Diodoros says. Pausanias was deposed fairly soon after the battle of Haliartos in 395,²³ i.e. in 395/4, a

²⁰ Because of the parallelism between *I.G.* ii, 620 (*Lysitheides*) and 'Ep. 'Apx. 1915, 1 (*Hieron*).

²¹ *Plat. Ages.* 28.

²² *Xen. Hell.* v, 2, 15.

²³ *Id.* iii, 5, 25.

year *before* Diodoros' year which is 394/3. We get this result then; Diodoros right once, almost certainly right once, wrong once. The probabilities then rather favour Diodoros; but Kolbe was right in saying that we cannot get away from a *possible* error of one year. It will be seen however that, where Diodoros is right, the death occurred very early in the Olympiad year, i.e. in the campaigning season which straddles that year and the year *before*, and not in the season which straddles that year and the year *after*; or, in other terms, in the Roman year which comprises the *first* half of the Olympiad year, on his equation. Consequently, while Areus' death in the spring of 264 is not absolutely impossible, the probabilities are enormously in favour of it having occurred in the campaigning season of B.C. 265; whether in the Olympiad year 266/5 or 265/4 is, for the purpose of placing Peithidemos, immaterial. Consequently we must put Peithidemos in 267/6.

Next, *Philokrates*, placed by Johnson in 266/5 really on account of the secretary rotation from Diokles. On the MSS. of Eusebios he can go anywhere from 270/69 to 266/5: the known facts of his year are, the thanks to the taxiarchs (*I.G.* ii². 685), and the embassy to Athens from Tenedos.²⁷ Neither of these will place him in the Chremonidean war. The taxiarchs are not recorded to have done anything; they only ὁ[ρ]ᾶ[ν] τῆν ἀρχὴν καλ[ῶ]ς καὶ κατὰ τὰς νόμους, which cannot be read as a war year. As to the embassy, Johnson quotes me as authority for Tenedos being Ptolemaic in 268²⁸. If I have said anything to mislead, I tender my apologies; but really I never mentioned Tenedos, or anything but the Islands of the League. Only one thing, as far as I can find out, is known about Tenedos till it appears as Attalid in the second century; but as after Koroupedion Seleukos got both Lemnos and the mainland opposite Tenedos, there can be little doubt, on geographical grounds, that he got Tenedos also. The thing I refer to is that the statue of Gonatas' queen, Phila, at Delos was set up by a citizen of Tenedos, which proves that anyhow circ. 246 the island was not Ptolemaic.²⁹ If Tenedos in *Philokrates*' year belonged to Antiochos, and if the embassy was political, then in that year Athens should have been under Antiochos' friend Antigonos. I attach little importance to this; we know no facts about the embassy. But as we have had, provisionally, to restore Menekles to 283/2, I am going, provisionally, to restore *Philokrates*, on the secretary rotation, to the corresponding year 268/7, the last year of Antigonos' rule in Athens before the Chremonidean war, and see where it leads us to in considering section two. The year 266/5 is then (provisionally) vacant.

We can now turn to section two and the problem of *Telokles*. This archon has to come before 271/0 (death of Epieurus). The three years 276/5–274/3 are barred; for if there was ever a pro-Macedonian government in Athens it was in these years, with Antigonos on the throne of Macedonia.

²⁷ *I.G.* ii². 684 combined with 732 b, if Wilhelm's combination of these two (*Ach. Mus.* 39, 1914, p. 313) be correct; he does not discuss it or give his reasons.

²⁸ *Antigonos Gonatas* pp. 105, 100, 290 are

cited.

²⁹ *I.G.* xi. 4. 1098 . . . ο[ρ]ᾶν ἀνα (-) / [T]ε[ρ]ᾶ [S]ω[φ]ῶ; a later and fuller reading than that in *O.G.I.S.* 216.

There are three indisputable pro-Macedonian years about this time, Euboulos Polyuktos, and Hieron: and it is certain that if Athens was Nationalist in 279/8 and pro-Macedonian a little later the change did not come before Lysimacheia in 277, and could not have come till a little after, i.e. after Antigonos had obtained the throne of Macedonia. Consequently, as Glaukippos belongs to the Chrononidean war, 277/6 is open for a Nationalist even if the change came in the latter part of the year.

I do not think that it admits of doubt that the years 273/2 and 272/1 are also possible for a Nationalist archon. Johnson has treated the events of 273/2-271/0 at length, and not only as regards Athens, for it is vital to him to prove that they were pro-Macedonian years at Athens; this is the basis on which he has rearranged the Delphic archons. I cannot discuss the question here; it would double the length of this already long paper. I have studied his arguments very carefully, and do not find them convincing; but I do not want to assert anything without going completely into details, so I am merely going to assume, provisionally, that these years may be Nationalist, for the sake of seeing where it leads us to. This is not to imply that I feel any doubt myself on the subject.

There is no *third* alternative; that is, we cannot put Telokles before Gorgias 280/79. Theoretically indeed we might put Ouirios 284/3, Telokles 283/2, Menekles 282/1, Nikias 281/0; but historically it seems impossible; for then Antigonos would have taken Athens spring 280, and also in spring 280 attacked Keraunos 'with land and sea forces,' Athens thereon rising again; and the attack on Keraunos alone was a matter requiring Antigonos' entire strength and considerable preparation. Incidentally, this arrangement would not preserve the secretary rotation either from Diokles or any later point. Again, we cannot, by putting Menekles and Nikias in 283/2 and 282/1 (where Ferguson, Kolbe, Kirchner, and myself all put them), put Telokles in the vacant year 281/0, for the pro-Macedonian government set up in spring 281 must have lasted till the rising of 280, i.e. 281/0 is a pro-Macedonian year, anyhow until spring 280. Telokles therefore falls in 277/6 or 273/2-272/1.

The arguments for 277/6, which do not come to much, are these: (1) We are sure of a Nationalist government; for 273/2-272/1 this is disputed. (2) Two of the *Bouleutai* praised in Telokles' year (*I.G.* ii. 1158) were Philippos son of Astygenes of Thymaitadae and Nikokrates son of Archomachos of Phegiai, who respectively moved the first decree of *I.G.* ii.² 672 in spring 278 and the decree *I.G.* ii.³ 656 in Isaios' year 286/5; Telokles therefore should come near these years. (3) In Telokles' year Epicurus wrote to his slave Mys. The best-known (and once famous) letter to Mys is much earlier;³⁰ so the earlier we can place Telokles the better. The arguments for 273/2 or 272/1, which again do not come to much, are: (1) The strategos of Telokles' year was Aristeides of Lamprai (*I.G.* ii. 1158), who, we have seen, was envoy to Orchomenos circ. 267/6; Telokles therefore

³⁰ *Usener, Epicurus*, pp. 148, 413.

should come as near the Chremonidean war as possible. (2) In his year (*I.G.* ii. 1158) the demos crowned certain members of the *βουλῇ, κρίνας ἄριστα βεβουλευμέναι*; no occasion for this appears in 277/6, but a revolt against Antigonos in 273/2 might have furnished one.

Here we must break off for a moment and consider the other displaced archon, *Thymochares*; for if Telokles be moved from 275/4 Thymochares cannot remain in 274/3. He is the archon of *I.G.* ii.² 700, an ephebe decree very like *I.G.* ii.² 665 of Nikias' year, which raises a presumption that he comes before 262/1;²¹ and the paidotribes of his year, Harmodoros of Acharnai, held the same office in Menokles' year, which makes the presumption almost a certainty. Also he follows an archon with ten letters in the genitive (*I.G.* ii.² 700). As we left 266/5 provisionally vacant, there are three archons he can follow: Demokles, Telokles, Peithidemos.²² All three are certain Nationalists, and 277/6 and 266/5 are Nationalist years. Also, if he follow Telokles, and we put the pair with Kirchner²³ in 273/2 and 272/1, then, 273/2 being a Nationalist year, 272/1 is certainly one also, anyhow to begin with (Pyrrhus in the Peloponnese). So whichever course we take Thymochares is a Nationalist. This is awkward, for the name, though not really rare, is not common, and one has an uncomfortable feeling that any day he may turn out to be Phaidros' son, the pro-Macedonian agonothetes of 276/5. As we shall see, there is only one way to remedy this, and it is not a hopeful way. We have in effect to neglect the possibility of his being Phaidros' son; it shows how difficult these archon-problems are.

Now how can we arrange the two? There is one thing we cannot do; we cannot leave Telokles in the pro-Macedonian year 275/4, sandwiched between the pro-Macedonians Euboulos and Polyseuktes without any reason. There are three things we can do, and one that we perhaps might do. We can put Telokles in 277/6 and Thymochares in 266/5. We can put Thymochares in 277/6; then Telokles must fall in 273/2 or 272/1. We can put the pair together in 273/2 and 272/1. Or we might perhaps put the pair together in 277/6 and 276/5, shifting Euboulos. This would put Thymochares in what is almost certainly a pro-Macedonian year, and so allow for the contingency of his being Phaidros' son; but it is not a hopeful arrangement. For if we shift Euboulos (first year of an Olympiad), he can only go to 272/1; that has long been certain. But in his year the veteran Phaidros reappeared in politics; he stood behind and aided his son²⁴ who was agonothetes. Phaidros had led the pro-Macedonians for many years; and if he was going to return to politics at all he must have done so immediately the pro-Macedonians regained power,²⁵ which was soon after

²¹ Kirchner's note to *I.G.* ii.² 700.

²² He cannot follow—again, as only three letters seem to be missing; Usener, *Epigraphica*, p. 134.

²³ Note to *I.G.* ii.² 700.

²⁴ *I.G.* ii.² 682 l. 58; *καὶ τὸν πατέρα αὐτοῦ*.

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²⁵ See *note*.

²⁶ Note that when Athens fell in Nikias' year, after her long spell of Nationalist government, Phaidros held office at once: *I.G.* ii.² 682, l. 52.

Lysimachida; he could not have waited till 272/1. However, we will pass this over and suppose for the moment that Thymochares in 270/5, i.e. Euboulos in 272/1, is possible.²⁶

The reader has already doubtless seen the dilemma to which this paper has been tending. Telokles can only go to 277/6 if Thymochares go to 266/5 or possibly 270/5. Of these two dates, 266/5 is only possible if we shift Philokrates, as I proposed, to his old date 268/7, and if we do, the secretary rotation from Diokles is gone. And 270/5 is only possible if we put Euboulos in 272/1, which in turn entails moving back Polyenktes and Hieron; and if we do, the secretary rotation from Diokles is gone. But again if we put Telokles in 273/2 or 272/1, the only alternative to 277/6, Polyenktes and Hieron must again go back; and then the secretary rotation from Diokles is gone. And there is no further alternative. It is therefore no longer possible to suppose that the secretary cycle ran from Diokles in 288/7 to Antipatros in 262/1 without a break; the only question is, what break.

Before coming to this, we must look at the other archons placed in section two. —Χαιρος is a mere name; he comes before 271/0. *I.G.* ii². 702 is a pro-Macedonian year, since Demetrios son of Demetrios of Phaleron ²⁷ τῶν προέδρων ἐπὶ(ψ)φιζερ; this unnamed archon can therefore belong to any of the three years 270/69–268/7, and is placed by the secretary cycle. Of *Philoneos* all we know is that the year after his (*I.G.* ii². 706) was a pro-Macedonian year, and that the paidotribes of that year, Hermodimos of Acharnai, held the same office in the years of Menekles and Telokles; therefore *Philoneos* should come before the Chremonidean war. 277/0 is possible, but there are already three candidates for this year with better claims, (since we do not know that *Philoneos* was a Nationalist year); he therefore probably belongs to whichever of the years 270/69 and 269/8 be not occupied by *I.G.* ii². 702.

Theophilos is an extraordinarily obscure problem.²⁸ He appears in *I.G.* ii. 859 (a list of the latter part of the century) which does not give his secretary; and again in *I.G.* ii. 3, 381 b, where the secretary is Φάλακρος Κηφισοδώρου Α— for which Ferguson, on the secretary cycle, conjectured 'Α[φιδραῖος]²⁹; tribe Αἰαντις XI. But 'Αφιδραῖος is a letter short; the gap demands nine letters. The alternatives for this are 'Αλωπεκῆδης (Antiochia, XII.), 'Αλεμύσιος (Leontis, VI.), 'Αμαξαντίος (Hippothontis, X.), and 'Αμμορενός (Hippothontis in the time of the thirteen tribes).³⁰ On the two former alternatives, *Theophilos* (if we assume that he is a different archon from him of *I.G.* ii. 859) cannot be placed in our period at all; on the two

²⁶ Of course in my view the pro-Macedonian Euboulos is impossible in 272/1. But I am neglecting this deliberately.

²⁷ Hegesandros ap. *Athen.* 4, 167 F.

²⁸ See Johnson in *Am. Journ. Phil.* 24 (1913), pp. 391, 417 (add.); K. Maltman, *Ες 'Αρχ.* 1913, 115.

²⁹ Also a Φάλακρος Αφιδραῖος is known,

(*Protop.* Att. 1438d, translated here, 323/2).

³⁰ Maltman gives the first two alternatives only; Johnson the first three. But Ammono was an unimportant deme, and is not known to have been transferred to Ptolemais; so the chances are that it belonged to Hippothontis throughout.

latter he might go to 272/1, if not already occupied. Kirchner however informed Johnson⁴¹ that Roussel had read Αφ on the stone; Johnson says that he could not see the φ himself, but I gather that he accepts Roussel's reading. If this reading be correct, the matter is settled: there is only one Theophilos, and he belongs to round about 227/6. If it be mistaken—and 'Αφιδναϊος remains a letter short—Theophilos might or might not be a candidate for 272/1: no one can say, for no one can be sure which of four demoties is correct. In the meantime we must assume that Roussel's reading is correct, and therefore that Theophilos does not belong to this period.⁴²

Finally we come to the much-discussed *Polyenktes*, followed by *Hieron* (year of the Soteria at Delphi); and here it will be necessary, in order fully to work out the implications of the Orchomenos decree, to consider Pomtow's dating of 276/5 for the Soteria, with 277/6 for Polyenktes, a dating now followed by Kolbe. Johnson, who puts the Soteria in 272/1 on the secretary cycle, gives as an independent reason that nothing could be done till after Lysimachia; and Pomtow gives precisely the same reason⁴³ for putting the Soteria in 276/5. This argument means that there was no 'salvation' till after Lysimachia; but as the Koan decree of spring-summer 278 (*Syll.* 398) is explicit that the 'Soteria of the Hellenes' was then regarded as already accomplished, this argument falls to the ground.

Pomtow's main reason is his Delphic archon-list.⁴⁴ It is however quite certain that we have not yet got any list of the third century Delphic archons, whether Pomtow's or another, which we can use with any confidence to date events by, as we can use the Delian archons; this is not really disputed even by Pomtow himself,⁴⁵ who still amends his list every other year.⁴⁶ And the various items of evidence which Pomtow bases on his list,⁴⁷ with one possible exception,⁴⁸ amount to nothing at all apart from the list, as anyone can see by looking at them. We have then to ask what are his reasons apart from the list. They are two. The first is the old argument from the burial of Sotia at Alexandria in the ninth year of some Ptolemy

⁴¹ *Loc. cit.*

⁴² Maltenre, whose article is a detailed study of the formula *αει/ελευθερι*, filled in 'Αφιδναϊος and put Theophilos in 228/7. But he wrote without knowing of Roussel's reading.

⁴³ *Klio* 14 (1914-15) p. 270: erst nach ihm (Lysimachia) ward die Soterienachfeier möglich.

⁴⁴ *ib.* p. 265 seq.

⁴⁵ *Klio* 15 (1915-16) p. 40: hier niemals ganz Arbeit getan und nichts Abzufassendes erreicht werden kann.

⁴⁶ Omitting older lists, there was one in 1913, *O.G.A.* 1913, 125; a revised edition next year, *Klio* 14, 265; in 1917 two new archons appeared and were not welcomed, *Klio* 15, 40.

⁴⁷ A useful summary of these by Pomtow in

his introductory note to *Syll.* 402.

⁴⁸ The possible exception is this argument, that the proposer of the Athenian decree of Polyenktes' year for the Soteria (*Syll.* 408 = *I.G.* II² 980) was Kylernios son of Kydiss, and that in the year of the Delphic archon Kratos the Delphians bestowed proxy on him ('*gratias agnosce*', *Syll.* 403). But there is nothing in No. 403 about '*gratias agnosce*' or any other reason; and if one is to guess why the Delphians (i.e. Aetolia) gave Kylernios proxy, one might just as well guess that it was on account of his son's heroic death against the Gauls (Pleisto Paus. 10, 24, 3: it evidently became famous). But in any case this does not equate Kratos with Polyenktes; he might be a year later, or even more.

(O.G.I.S. 36). But it still remains to be shown that the Ptolemy of these vases was Philadelphos; against this, beside the style of the vases, is the great authority of Grenfell and Hunt, who, in their exhaustive examination of the relations between the Macedonian and Egyptian calendars, absolutely deny its possibility;⁴⁰ quite apart from the discussion as to what the ninth year of Philadelphos may mean.⁴¹ As Pontow has no new arguments,⁴² and merely refers back to the old reasons he gave in *B.Ph.W.* 1910, 1087, which were not satisfying, we may leave Sotion as a *proof* out of the question.

The other reason consists in an *a priori* assertion that it is *impossible*⁴³ for the Soteria to have fallen in the same year (274) as the Pythia, supported by an examination of the term *ισοτιμία*⁴⁴ in the Chian decree for the Soteria (*Syll.*³ 402). Pontow's argument is that this would in effect have amounted to holding an identically similar musical contest twice over in one year; that is, he treats *ισοτιμία* as meaning *ἐπιισοτιμία*, — 'Pythiengleichheit'.⁴⁵ But this is not the correct meaning; he has himself quite frankly given the very clear epigraphic evidence (I need not repeat it) which shows that it means *ἰσος τιμία* — equal honours to the victor — and has then decided dead against his own evidence. As to the 'impossibility', I do not propose to argue *a priori*,⁴⁶ but to give a parallel. Some time between 315 and 251 the Argives transferred the Nemea to Argos, and by some date which is probably prior to 251 the Nemea and Heraia had become a single festival;⁴⁷ later they were again separated, but *continued to be held in the same year*; in 209 Philip V. presided at the Heraia at Argos, returned to Aigion for his conference with the Aetolians and mediating states, which took some time, and then, when the time of the Nemea drew near, went back to Argos to be present at the Nemea.⁴⁸ This shews that two festivals of importance *could* be held in the same city in the same year separately and without interfering with each other, and seems to dispose of Pontow's *a priori* reasoning.⁴⁹

Kolbe,⁵⁰ accepting 277/6 for Polyenktes and consequently breaking the secretary rotation in that year, has given a new rotation from 277/6 to 262/1, which need not detain us long; for it involves placing Glaukippos in 267/6. This is an absolute impossibility; for 267/6 was either Peithodemos or (if Peithodemos be 266/5) was not a war year, and Glaukippos (as Johnson has

⁴⁰ *Hilch Papyri*, vol. 1 App. 1; see p. 347.

⁴¹ For the various considerations involved in the Sotion question see Vergam, *Hellenistic Athens*, p. 164, n. 1.

⁴² *Klio* 14, 290.

⁴³ *Klio* 14, 277-280; *Syll.*³ 402 n. 10. Prima vix Soteria nulla modo una cum Pythia celebrata esse potest per se patet.

⁴⁴ *Klio* 14, 279.

⁴⁵ Sotion's literary brings out sharply the distinction between *fest* and *Games*.

⁴⁶ See Kirchhoff's introductory note to *Syll.*³ 402 for an *a priori* answer.

⁴⁷ Decree of Argos for Alexander of Sikyon,

published by Vollgraf, *Memorabilia* 44 (1916) p. 65; see l. 16, *τὰς δὲ ἑκατοστήσας τὰς Νεμεὰς καὶ Ἡραίας τὰς ἐορτὰς καὶ τὰς ἐν τῇ πόλει τὰς ἑορτὰς καὶ Νεμεὰς*.

⁴⁸ *Livy* 27, 30.

⁴⁹ The Soteria question has produced a curiosity of editing. The Chian and Athenian Soteria decrees admittedly belong to the same year; but in *Syll.*³ the former (402), edited by Pontow, is dated a. 274, the latter (405), edited by Kirchhoff, is dated a. 275/4.

⁵⁰ *Klio* 14, 267-270; largely occupied with discussing the date of Glaukippos.

proved) was a war year,⁴⁰ — unless we like to take the view that the Chremonidean war began more than a year before the well-known resolution moved by Chremonides in September of Peithidemos' year, which marked its inception. Kolbe does give an independent reason for Polyseuktes in 277/6, but it is not a happy one and has already been sufficiently refuted.⁴¹ The striking thing about Kolbe's list is the way it mixes up Nationalist and pro-Macedonian archons.

My reason for going into this is that at last we have a definite bit of evidence which seems practically conclusive against 277/6 for Polyseuktes. His year was pro-Macedonian beyond question (sacrifices for Antigonos).⁴² But we now know as a fact, from the Orchomenos decree, that 279/8 was a Nationalist year, a pro-Macedonian archon in 277/6 is therefore *prima facie* impossible, for the Nationalist government cannot have been overthrown till after Lysimacheia (late 277 at the earliest) and not till sufficient time had elapsed after the battle for Antigonos first to occupy Macedonia. The Nationalists, at any rate till 262/1, were still much the stronger party at Athens, just as they were in Demosthenes' time, and were never overthrown without Antigonos' intervention. But we now know, as I have shown in this paper, what Antigonos' movements were from 279 to 277: he was never near Athens, he was fully occupied elsewhere, and no occasion occurred on which the Nationalists could have been overthrown till after Lysimacheia. The Orchomenos decree seems to have made it quite impossible (if it ever were possible) to put Polyseuktes in 277/6, unless some definite and valid reason can be shown for the overthrow of the Nationalist government prior to the elections of 277.

One further remark. In view of the Soteria, it was very necessary to the Athenian pro-Macedonians to show that Antigonos also had, at Lysimacheia, brought *εὐνομία* to the Hellenes. This, as is well-known, was done by Herakleitos of Athmonon through a specially splendid celebration of the Great Panathenaia of 274/3.⁴³ This festival was the pro-Macedonian counter-manifesto to the Delphic Soteria, and it is natural to suppose that the years were identical. *A priori*, the three pro-Macedonian archons of this period, Euboulos, Polyseuktes, Hieron, ought to correspond to the three years (276/5 to 274/3) of Antigonos' undisturbed rule in Macedonia.

Now as to the break in the secretary rotation. We have seen that either Philokrates or Polyseuktes-Hieron in Johnson's list *must* move back, on account of Telokles; and that Menekles ought to. A move of one year is not feasible. It would bring Philokrates to 267/6 and Glaukippos to 264/3; both are im-

⁴⁰ Because of the sacrifices for the *εὐνομία* of Athens and her allies, *I.G.* II² 674. (Add the sacrifices to Zeus Soter and Athena Soteria, *I.G.* II 225.)

⁴¹ He was in the 'system' of *I.G.* II² 683, (Polyseuktes' year, the Little Mysteries (4th year of an Olympiad). See on this Kiechler's introductory note to *Syll.* 408.

⁴² Athens' acceptance of the invitation to the Soteria was of course a purely religious act, and has no political bearing at all.

⁴³ *I.G.* II² 677 (prayer for Herakleitos), Great Panathenaia, because of the preparations, adorning the stadium, etc. (Date: Ferguson, *Klio* 8, 348).

possible, and therefore we should have to assume a second and arbitrary break in the secretary cycle, as well as the break before Menekles. Historically there is everything against it; and it would bring the Soteria to the impossible year 273—impossible because, if the Soteria are not in an Olympic year, then they are certainly in a year of the Pythia.⁴¹

The list from Menekles onward must therefore go back *two* years, as the historical material demands:—Menekles 283/2, Nikias 282/1, Polyseuktos 275/4, Hieron 274/3, *I.G.* II² 702 in 270/9, Philokrates 268/7, Glaukippos 265/4, and we are essentially where we were in 1913. There is no other course open. The break in the rotation then is a two years' break somewhere between Euthios (285/4) and Menekles (283/2), as I supposed before; it is now entirely confirmed by the new facts derived from the Orchomenos decree. I cannot explain the break, but the evidence, as it stands at present, is much too strong to allow us to explain it away. I note that Johnson has to reckon with a two years' break in the rotation of the priests of Asklepios in 285/4 and 284/3.⁴²

The result is (if I am right) that the main outlines of Ferguson's chronology from Menekles onward, which I adopted before, still stand, fortified in essentials, modified and amplified in details, and with one important change, Periklides. But, with Menekles 283/2, the secretary rotation, as I proved before, cannot be carried backward unbroken from Menekles to Diokles; and it would have been a tremendous help to have had an established archon-list with an unbroken secretary-rotation all the way from 288/7 to 262/1. So I rather regret my conclusions in this paper. But our loss is more apparent than real, for obviously a list based on the secretary rotation, when only nine secretary tribes are known for a period of twenty-three years, is not a real rotation; any day some more name, like Tolokles, may take form and substance to disturb it. For many years yet we shall have to go step by step, not hesitating to discard our own former opinions in the light of new facts or juster interpretations of old ones.

For convenience I summarise results with certain chronological indications.

Nat. Gov.	286/5	Isaios VI. First war ends spring 285 (captivity of Demetrios).
	285/4	Euthios VII. Peace. Decree for Philippiades.
	284/3	Oorios IX. Peace, archon till spring 283 (Demetrios' death).
	283/2	Menekles XI. The second war, <i>rel. melioris prospera</i> , after Demetrios' death.
Pro-Mag. Gov.	282/1	Nikias Otryneus XII. Athens taken early spring; change of government. Decree for Strombichos.
	281/0	Uncertain. (<i>I-knos</i>). In 280 Antigonos against Keraunos; Antigonos against Antiochos (indirectly); general revolt in Greece, including Athens.

⁴¹ Shown by the gap (a. i. 29 of the Chian Soteria decree, *Agd.* 402; it unquestionably requires either 'Olybia or Delia, but of course

the decree alone does not enable us to say which.

⁴² *Class. Phil.* 9, 254.

	280/79	Georgias. Decree for Demosthenes. Athens free before the elections of 279 at latest, probably in 280. <i>Polarchia Epōchos</i> early spring 279. Spring 279; Antigonos against Antiochos.
Nat. Gov.	279/8	Amaxikrates. Kallippos strategos. Antigonos' treaty with Antiochos, circ. autumn 279; he invades Macedonia. <i>Polarchia Epōchos</i> in winter.
	278/7	Demokles. Antigonos <i>Macedonias dexiōtes</i> .
	277/6	Uncertain. (Telokles and Lysithoides possible; Thymochares possible if Telokles be 272/1; Philomelos possible but unlikely.) Lysimachēia. Antigonos recovers Athens before the elections of 276.
Pro Mac. Gov.	276/5	Euboulos. Reappearance of Phaidros in politics. Antigonos king of Macedonia. Pyrrhus defeats him spring 273.
	275/4	Polysunktos VII. Decree for Phaidros.
	274/3	Hieron VIII. Soteria.
Nat. Gov. (this is disputed).	273/2	Uncertain. Telokles and Lysithoides possible.
	272/1	Uncertain. Telokles and Lysithoides possible; Thymochares probable if Telokles be 273/2.
	271/0	Pytharatos. Decree for Demochares.
Pro Mac. Gov.	270/89	<i>I.G.</i> II ² 702. XII. Demetrios, son of Demetrios of Phaleron, active.
	269/8	Uncertain; most probably Philomelos.
	268/7	Philokrates II. Embassy from (Seleukid) Tenedos.
	267/6	Peithidamos. Beginning of Chremonidean war.
	266/5	Uncertain. Thymochares almost certain if Telokles be 277/6. Thymochares possible if Telokles be 273/2 or 272/1. Lysithoides possible if a vacancy.
Nat. Gov.	265/4	Glaukippos V. Death of Areus in campaigning season of a.c. 265.
	264/3	Diognetos.
	263/2	Uncertain; Lysithoides possible.

It will be noticed that there are seven years marked uncertain, and only five names allotted among them. Sosistratos, who should come somewhere in this period, is probably the sixth. The seventh name must be treated as unknown. I am not considering the problem of 262/1, which belongs to the ensuing period.

W. W. TARN.

THE FINANCIAL HISTORY OF ANCIENT CHIOS.

THERE is at present an unfortunate hiatus between the study of Greek history and the science of Greek coins. The historians, if we except Holm have not had familiarity with Greek coins, and the numismatists have seldom gone into larger questions; they have mostly been occupied with minute details, which no doubt in their way are important. Yet coins give the investigator most exact and trustworthy information; and in matters of commerce and finance are first-hand authorities. My *History of Ancient Coinage* was meant to do something towards filling the hiatus; but much remains to be done.

At present I propose to treat briefly of the financial history of Chios as exhibited in the coins. I select that city for two reasons. In the first place the importance and wealth of the city, and its close connection with the main stream of Greek history, give it a claim to preference. In the second place the coins of Chios have been so fully and satisfactorily treated of by numismatists that I need not enumerate or discuss them in detail. Mr. J. Mavrogordato in a series of papers in the *Numismatic Chronicle*¹ has arranged them in an order which I am able to accept, and I am justified in building in confidence on the foundation which he has laid down.

The coin-type of the island, the Sphinx, is so closely adhered to, that it is scarcely varied, save in style. The meaning of this type, and of the amphora which commonly goes with it, is beyond doubt Dionysiac. At all times Chios has been noted for wine, a fame which still persists. From the trade in wine the wealth of the island, on which Thucydides dwells, was mainly derived. But the island had another natural product. It consists largely of marble, marble of a fine white texture, which is scarcely to be distinguished from that of Paros. Through the sixth century there persisted a family of sculptors who were known far and wide, and were indeed some of the earliest marble workers of the Aegean. The founder of the family, Micejades, lived about B.C. 600, his son Archermus may be given to about 570, and his grandsons Bupalus and Athenis to about 540, being contemporaries of the poet Hipponax. Pliny² cites this date (*Ol. 60*) and adds that

¹ *New Chron.* 1915, 1916. Compare Miss Agnes Baldwin in the *Journal of the American Numismatic Society* for 1914, and the great treatise of Head and Babylon.

² *Nat. Hist.* xxi. 12. This distich I would venture to restore as follows:—

Οὐκ οἶδ' ἀντιπάλῳ Σὺν ἀρχαῖοντι πότι
"Αλλὰ καὶ Ἀρχέρμῳ τῷ τε ἀνδρὶ καὶ
ὁ Ἰππὸνῳ τῷ τε.

If this restoration be correct, we may not only add two new poets to Parmenides, at the rate of one line apiece, but also recover what is perhaps the oldest of poetical inflections.

they inscribed on some of their statues the distich that Chios was not famed for vines only, but also for the works of the sons of Archemus.¹

Another source of wealth at Chios was less honourable. The people were notorious slave-dealers, and we learn from Herodotus² that one of them, Pantomus, did not content himself with importing barbarian slaves into Greece but sold handsome young Greeks at Ephesus and Sardis for service in Persian harems. At all periods the slave trade was the most important and lucrative branch of Greek commerce. The slaves came partly from the barbarian lands in the neighbourhood of Greek cities, Scythia, Phrygia, Thrace and partly from Greek cities which were from time to time conquered, when as a general rule the inhabitants, or at all events the women and children, (the men being slain) were sold to the dealers who regularly followed Greek armies, to provide supplies and purchase spoil of all kinds. Certain places in particular had markets well supplied with slaves. Strabo tells us³ that at Delos, in Roman times, tens of thousands of slaves changed hands and were shipped off in a day. Chios, Corinth and Aegina at an earlier time were great emporia of slaves.

The wealth of Chios makes it not at all surprising that coinage should have begun early there, both in electrum and in silver. The electrum was struck on the South Ionian standard of Miletus, staters of 216-220 grains (grm. 14-14.25) which belong to the early part of the sixth century. Mr. Mavrogordato observes that, while in other cities of Ionia fractions of the stater, thirds and sixths, were issued in electrum, this was not the case at Chios; the lower denominations being struck in silver.

Whereas in issuing electrum staters Chios merely stood in line with Miletus and Lydia, in issuing silver in the early sixth century, the city stood apart. The origin of silver coin in Asia is worth tracing. In the seventh century B.C. the people of Aegina issued the earliest silver coins struck in Greece on a standard of their own, thence called Aeginetan. The idea was at once taken up by other states. The chief islands of the Aegean main, Paros, Ceos, Naxos and others at once copied the silver coins of Aegina. That they should have copied their fabric, and the rough incuse square of their reverse, was no doubt natural. But they went further, they imitated the tortoise in the types of their obverse, not actually adopting that type but using others such as the cuttle-fish which nearly resembled it. And they adopted the Aeginetan weight, so that their money passed with the Aeginetan in commerce and is found mingled with it in hoards. But not only in the islands were the coins of Aegina copied. In the same class with the island didrachms we must place coins of Chios which bear the type of a sphinx seated not in an upright but in a crouching attitude, with two incuses on the reverse, one larger and one smaller. Their weight is that of an Aeginetan didrachm, 192 grains or 12.44 grammes.

That they belong to Chios has been disputed. Mr. Head and Mr. Mavrogordato alike accept this attribution. Miss Agnes Baldwin disputes it.⁴

¹ *N.H.*, xxxv. 11.

² *ibid.*, 103.

³ *ibid.*, 103.

⁴ *American Journal of Numismatics*, 1914, vol. 45 (ii), p. 52.

And it must be confessed that alike the fabric and the incuse are different from those later usual at Chios. The incuse is that found on coins bearing a crab as type, and usually given to Cos, and on others of Cnidus. As these latter coins were struck at the same period as ours of Chios, and under the same influence, their resemblance to it rather confirms than disproves my attribution. These were probably the earliest silver coins issued in Asia. As Asia Minor was the fountain-head of gold and electrum coins for the world, so was Greece Proper the fountain-head of silver coins.

Some of the cities of the west coast of Asia Minor followed suit. Besides Chios, such cities as Cyma, Miletus, Teos, Phocaea, Iasus, and Lindus issued, before the middle of the sixth century, coins on the Aeginetan standard. Now several of these cities were at the time striking staters of electrum, and it is natural at once to raise the question in what relation as regards value the silver coins of Aeginetan weight stood to those staters. The ordinary proportion of value between electrum and silver at the time was ten to one. But at that rate the new silver coins would not fit in with the electrum at all. It seems almost certain, strange as it may appear to the more business-like people of modern days, that cities of Asia struck these imitations of the Aeginetan silver staters without considering how they would fit in with their electrum issues. It is not difficult, however, to find modern parallels. The English Government, at the time of the Abyssinian war, struck copies of the old dollars of Maria Theresa of Austria, because they were readily accepted in Africa, though they belonged to a different monetary standard from the sovereign and the shilling.

It is probable that the reason for the innovation was that the staters of Aegina had made their way as currency both in Greece Proper and in the Euxine region. At all times the commerce of the Euxine was the most important of Greek spheres of trade, and when Miletus and Aegina were rivals in that sea, Milesian electrum and Aeginetan silver might well jostle one another in the markets, electrum being more in favour in Lydia, and silver in Pontus. When they met, and came into competition one with the other, their relative values would be decided by what Adam Smith calls 'the higgling of the market.' As coins were then a novelty, and the precious metals had hitherto circulated by weight only, this would not be nearly so inconvenient as a modern economist might fancy. When a bargain was made, it would usually be part of the bargain to state in what particular currency the price was to be paid, and thus ambiguity would be avoided.

However, the Chians soon gave up so awkward an arrangement, and began a regular issue of silver coin on a standard of their own. As the details of ancient commerce have never been thoroughly worked out, anyone who treats of ancient coins, not from the special or numismatic but from the broad or historic point of view, comes at once upon a number of questions to which it is very difficult, or even impossible, in the present state of our knowledge, to find an answer. One of these questions is as follows. Most of the Greek cities of the Ionian and the Thracian coasts, when they begin to

issue silver coin in the sixth century or later, do so on a standard of weight which evidently had been long fixed, and which persists in a most remarkable way for centuries. And this standard varies in a curious way from city to city, even cities within a few miles of one another being seldom quite uniform. Samos, Ephesus, Carpathos, Erythrae, Cos and many other places proceed thus. In Greece proper, as in Italy and Sicily, this is far less the case: there certain recognisable standards dominate regions or groups of towns. The Aeginetan standard, for instance, is dominant and uniform in Greece from Thessaly to Messenia. The Attic standard prevails almost exclusively in Sicily. But on the coasts of Asia Minor and of Thrace there is a curious persistency of local standards. No doubt François Lenormant goes far beyond the mark when he says that Greek cities adopted monetary standards in complete disregard of those of their neighbours. But his remark is nearer the truth in Asia than elsewhere. It is possible that, as gold was the chief standard of value in Asia, the cities of Ionia at various times adopted standards with a view to making a certain number of the silver coins pass for one gold unit; and that, when the standard was once thus fixed, it persisted. It is generally held that the widely prevalent silver standards of Persia and Phoenicia did thus arise in an attempt to adjust the value of the silver units to that of the gold units. It may be that the cities of Ionia, in their autonomy, tried to follow the same course at various periods, thus obtaining various standards for silver. This, however, is no more than possibility. And in the particular case of Chios, as we shall presently see, more satisfactory explanation is forthcoming.

The Chian standard for silver, which persists from the middle of the sixth century until the middle of the fourth, is slightly, but quite perceptibly, lower than those of Euboea and Athens. The drachm at Chios weighs 60 grains (gr. 3.88), that of Euboea 65 grains (gr. 4.21), that of Athens 67½ grains (gr. 4.37). Considering the usual irregularity in the weights of silver coins, it may seem that such slight differences cannot be distinguished in the coinages of various cities, and certainly any conclusions we draw from such variations must be open to doubt. Yet the test, if used with care, is valuable, and quite worth considering in the solution of questions of currency and commerce. Some writers consider the standard of Chios as derived from that of Phocaea. This is, of course, possible; the two standards are practically identical in weight, and the weight comes in at Chios at the time of the great vogue of Phocaean commerce. But I am rather disposed to regard the silver standard, both at Phocaea and at Chios, as derived from Aegina.

By far the most important fact in regard to the silver standard of Chios—and here we reach bed-rock—is that it fitted in with the Aeginetan standard of Peloponnesus and Greece Proper. This we know on definite testimony, on which I shall dwell later, for Thucydides tells us that, in paying the Lacedaemonian fleet in Chian money, the Chian tetradrachm was reckoned as a fortieth of the Aeginetan mina. This exactly corresponds to the fact: a coin of 240 grains multiplied by 40 comes to 9,600 grains.

which is exactly the weight of an Aeginetan mina. The phrase of Thucydides mentions Chian fortioths as a recognised kind of coin; and this seems to imply that the correlation of the Chian coinage with that of Peloponnese was not a recent thing at the time of which Thucydides speaks, B.C. 411, but was a recognised fact. If we remember that the Aeginetan standard had actually been in use at Chios for silver early in the sixth century, I think we are driven to the view that the regular Chian standard was also borrowed from Aegina. When about the middle of the sixth century most of the cities of Asia which I have mentioned gave up the Aeginetan silver standard, a few persisted in its use, such as the Ionian city of Teos, Cnidus in Caria, and especially the Greek cities on the Euxine Sea. Chios I think, also retained the Aeginetan standard, but in a modified form. Instead of dividing the Aeginetan mina of 9,600 grams into 100 drachms of 96 grains, the city divided it into 160 drachms of 60 grains. Thus a Chian drachm would be $\frac{2}{3}$ of an Aeginetan drachm in weight and value.

I am convinced, although it is not the universal opinion of numismatists, that when Croesus of Lydia, and after him the Persian Kings, issued coins of pure gold, well known in Greece as the Croesean and Daric staters, the Ionian cities gave up the issue of electrum and used the gold coins of the suzerains instead. It was a natural accompaniment of the Ionian revolt against Persia in B.C. 500 that they should resume the issue of electrum money. The issue of silver coin was not intermitted, the King of Persia not having the same objection to the striking of coins in the poorer metal by the Greek cities. The cities of the Ionian League, at the time of the great Ionian revolt, issued electrum coins uniform in incuse and weight, on the Milesian standard of South Ionia, but each city kept its own type. Those of Chios naturally bore the sphinx. I was the first to identify the coinage of the League.⁷ Chios was its heart and soul, and furnished the largest number of ships to the fleet. After the disastrous defeat at Lade she suffered severely, and only by degrees resumed her place at the head of the Ionian states. With the Persian victory the electrum staters of Chios, as of the other cities, ceased to be struck, and Persian gold took their place.

The question arises what relation the silver drachm of 60 grains (grm. 3.88) bore to the electrum stater of 220 grains (grm. 14.25) in use at Chios during the Ionian revolt.⁸ When money was issued by a Greek city in two metals, the adjustment between the two issues took place on one of two lines, which indeed are the only lines feasible. Either the bimetallic plan was adopted, gold and silver being struck of such a weight that a certain number of pieces of silver passed as equivalent to one of gold or electrum.

⁷ *Proc. Roy. Acad. 1888*, p. 119; *Journ. Hellen. Stud.* 1911, p. 151. Mr. B. Jonsson arrived independently at similar views (*Rev. Numism.* 1911). Mr. Svoronos has disputed the attribution and attempted to transfer the whole set of coins to cities of Macedonia

and Thracia (*L'Hellénisme Précoce de la Macédoine*, p. 211). This assignment seems to me impossible; but I am glad to see that Mr. Svoronos accepts the date of B.C. 500.

⁸ *Macedonian Period IV.*

This was the plan of Croesus and the Persians: among the latter the gold daric of 130 grains was equivalent to 20 silver shekels of 86 grains. Or else the monometallic plan was adopted, and both gold and silver were struck on the same standard, one metal being the standard of value and the other fluctuating in worth, the gold exchanging for a various number of silver pieces according to the *agio* of the time. Athens, when about B.C. 400 she began to strike in gold, followed this course, the silver drachm of 67½ grains being the standard coin and gold pieces of the same standard passing as they could.

As electrum and silver were not, at Chios, struck on the same standard, it would seem that the city adopted the bimetallic course, which, in fact, was usual in Asia at the time, and the ratio between the value of electrum and that of silver at the time seems to have been fixed at 10 to 1. The electrum stater of 220 grains would then be equivalent to 2,200 grains of silver, that is, to 36½ silver drachms of 60 grains, or to 55 tetrobols of 40 grains. This equivalence may furnish us with a reason why, just at the time of the revolt, the Chians issued not the drachm in silver, but the tetrobol, or two-thirds of the drachm. Obviously the smaller denomination would more readily fit in with the electrum stater.

Chios, after a short interval, about B.C. 460, began a fresh experiment in electrum. The city struck staters, not on the old standard of Miletus, but of uniform weight with the electrum staters of Cyzicus. They bore the type of a ephinx and an amphora, surrounded by a wreath of vine, and were closely similar to the staters of Lampascus, which also bear the vine-wreath, and which are dated by inscriptional evidence to B.C. 447.⁹ Of these Chian staters only one is known,¹⁰ an indication that they were sparingly issued. They may be regarded as another bid for the trade of the Euxine, which Athens jealously preserved for herself, and probably as an unsuccessful bid. We know, from some of the orations of Lysias and Demosthenes, especially from the speech of the latter against Phormio, that the Cyzicene staters were largely used by the Athenian traders to the Euxine.

The abundance and the great variety of the electrum staters of Cyzicus present a problem of which no satisfactory solution has yet been found. That Cyzicus was in the fifth century B.C. a place of moderate importance, though it had two good harbours and a fine situation for commerce, is shown by the fact that in B.C. 411 it was unfortified, and was occupied by the Athenian fleet without resistance.¹¹ That the staters were merely a local coinage is not probable. The contemporary Cyzicene silver, far less abundant, was no doubt the regular local coinage: but it seems certain that the coinage of electrum was issued under the patronage of some higher authority. It never bears the name of the city.

I may be allowed, though it may be regarded as a digression, to say a few words as to the bearings of these electrum issues of the fifth century.

⁹ Gardner, *History of Ancient Coinage*, p. 238.

¹⁰ Marquardt, *Period V*, No. 9.
¹¹ Thuc. *iii.* 107.

Cyzicus struck staters continuously and in great abundance; Lampsacus came in, also in abundance, in the middle of the fifth century; Chios and Mytilene made some effort to come in also, but apparently without success.

Very puzzling is the question whence came the abundant gold implied in this electrum coinage. It may have come from one of three sources, either from the shores of the Black Sea, to which the gold from the Ural Mountains made its way, or from the gold mines of Crenides in Thrace, whence later Philip of Macedon obtained the supplies of gold which were one of the chief sources of his power. (Until the rise of Macedon, Athens was mistress of the gold mines of Thrace, and made it a corner-stone of her policy to remain so.) The third possible source was Persia. That the Persians controlled great stores of gold is proved by the statements of Herodotus in regard to the Persian tribute; probably it came largely from India. When Alexander captured Ecbatana and Persepolis and other Persian cities, he found enormous stores of gold hoarded there by the Persian kings. The power which was really at the back of the Cyzicene electrum has usually been assumed to be Athens; and that is the view which I have accepted in my *History of Ancient Coinage*.¹² Certainly the Athenians used the Cyzicene staters for state payments; this is proved by the inscriptions of Athens, as Mr. Woodward has shown in an excellent paper.¹³ Sometimes a payment of many thousands of them is recorded. Some of the types too are of Attic origin, such as the Athenian Tyrannicides, George, Ge holding the young Erichthonius, and Triptolemus in his winged car. Other types are taken from the coinages of a variety of cities.

It does not seem to have occurred to numismatists, as an alternative, that perhaps the issue was under Persian patronage. Yet this view has a good deal in its favour. Cyzicus was in the immediate neighbourhood of Dascyleum, the Persian capital of the important Hellespontine satrapy; and Cyzicus, being an unwall'd town, would be unable to defy the Persians who occupied it without resistance after the Ionian Revolt. Cyrus the Younger, when he was in revolt against his brother, paid his Greek mercenaries in Cyzicene staters. It seems possible that if the Persian kings found the prejudice among the Greeks against the royal darics, which bore the effigy of the Great King, very strong, they may have countenanced a neutral coinage for the payment of mercenaries and the purchase of supplies. It has always been a puzzle why the Great King, who jealously reserved to himself the issue of gold coin, should have allowed plentiful issues of Cyzicene electrum; but if he encouraged them for his own purposes the difficulty would vanish.

It seems quite likely that Cyzicus was a mart through which the wares of Greece proper were imported into the northern (Persian) provinces of Asia Minor, and that the Persians paid for them in gold, gold which might be minted by the people of Cyzicus in the form of electrum staters, and so passed on to the trading cities, especially Athens, which supplied the

¹² p. 237.

¹³ *Journ. Hell. Stud.*, xixiv, p. 276.

wares intended for Persia. This is at least a probable hypothesis in a matter in which at present certainty is not attainable.

Athens never adopted bimetallicism; and it is clear from the speeches of Demosthenes that in various cities of the Euxine the staters of Cyzicus were regarded as equivalent to a varying number of Attic silver drachms usually 26 to 28. It seems however that in Asia the stater was regarded as equivalent to the Persian daric or to twenty Persian sigli or drachms of silver. Thus Athens seems to have treated the Cyzicene staters on a monometallic basis, Persia on a bimetallic, which is just what we might have expected.

The silver coins on the Chian standard were issued without interruption from the seventh century until the time of Alexander. There were indeed slight fluctuations in the standard, to which Mr. Mavrogordato calls attention. Didrachms of an early period are known which weigh as much as 123 grains (grm. 7.97). But these fluctuations are not of great importance. We are well accustomed to them in most series of Greek coins. And they are easily accounted for if we consider facts seldom sufficiently regarded by numismatists. The ancient moneyer did not endeavour to make his coins strictly of the same weight. Out of a mina of silver he had to produce 100 drachms, 50 didrachms, or 25 tetradrachms. If he somewhat overdid the weight of a few examples he would economize in the case of a few others, to make an average. The methods by which a modern mint-master secures uniformity in the weight of his blanks were not used either in antiquity or in the middle ages.

At some time which cannot be exactly fixed, but which Mr. Mavrogordato on grounds of style assigns to about B.C. 431, the beginning of the Peloponnesian War, the silver issues of Chios undergo a decided change. Up to that time the stater or standard coin was the didrachm of 120 grains, and the most usual coin of lesser denomination was the third of this, the tetrobol of 40 grains. Division of larger units by three was a well-established custom in the mints of Asia, in the case of electrum universal. But in the case of silver the drachmal division into halves and quarters of the stater had been the regular custom at Aegina, and with the Aeginetan system came into some of the cities of Asia. But the trial division still held good in some places, notably at Corinth.

In the new coinage at Chios, the tetradrachm comes in as the principal coin, and the fraction thenceforth used is not the tetrobol, but the drachm of 60 grains. We may perhaps see in this the growing influence of Greece Proper, as against that of Persia.

It is from this period, B.C. 431, and the establishment of a tetradrachmal coinage at Chios, that we may trace a gradual aggression of the Chian monetary system in the north of the Aegean. It is indeed not easy to trace it in detail, for the coinage of the cities of Thrace and the Propontis offers many irregularities, and the changes of standard in the district are frequent and obscure.¹¹ But I will venture to put forth a view as to the successive stages of the spread of the financial influence of Chios in this region.

¹¹ Thus in my *History of Ancient Coinage*, pp. 289, 290, I abstained from following up the subject.

We may distinguish three stages in the process. First, we have the period from B.C. 431 to the expedition of Brasidas in 424. Second, there is the period from 424 to the revolt of Chios against Athens in 412. The third period extends from 412 to the taking of Athens by Lysander in 405, and on into the fourth century: in it, the financial influence of Chios grows more rapidly, and with the adoption of the Chian monetary system by the rising city of Rhodes its triumph becomes assured.

I. B.C. 431-424. The clearest phenomenon of this time is the adoption of the Chian drachm for small coins in many of the cities of the Propontia. The large money of the district probably consisted of the coinage of Athens. But many cities, such as Antandros, Lamponcia, and Neandria, issue money for local use of Chian weight, as does Calchedon on the Bosphorus. The twin city of Calchedon, however, Byzantium, adheres during this time to the Persian weight for small coins as do several of the cities on the Hellespont such as Cardia and Abydos. It seems, however, that the Chian silver drachm and the Persian tetradrachm or two thirds of a drachm were regarded as equivalents; and indeed they differed but little in weight.¹⁶ The Chian drachm then would be regarded, wherever the Persian daric prevailed, as the thirtieth of that daric, or of the Cyzicene stater which was its equivalent.¹⁷

II. B.C. 424-412. The expedition of Brasidas, and the peace of Nicias in 421, which followed that expedition, certainly mark a more rapid recession in Thrace of the Athenian, and an encroachment of the Chian monetary system. In the whole region, from Chalcidice on the west to Byzantium on the east, we find a marked change in the coinage as a consequence of the successes of Brasidas. The coinage of the Chalcidian league, issued at Olynthus, begins about this time.¹⁸ It consists of very beautiful coins bearing a head of Apollo, executed in the style of the fifth century, and the inscription ΧΑΛΚΙΔΕΩΝ. From the first it is struck not on the standard of Athens, but on that of Chios. It is true that most numismatists consider that the monetary system is taken not from Chios, but from Abdera. But the Chian derivation is rendered more probable by the fact, that just at this time the people of Abdera give up their ancient standard, almost identical with that of Chios, and adopt for a few years the monetary weight of Aegina. This they do, according to the careful researches of van Fritze, during the years B.C. 425 to 400.¹⁹ The reason of this sudden variation at Abdera is quite unknown. But we may make two observations in regard to it, first that in any case it must indicate a turning away from the Athenians to the Peloponnesian alliance; second, that it lays fresh emphasis on the influence of Chios, since everywhere else save at Abdera,

¹⁶ *History of Art, Coinage*, p. 298. The Persian tetradrachm should weigh about 58 grains and so be a little lighter than the Chian drachm of 60 grains.

¹⁷ I have tried to prove the equivalence of the Persian daric and the Cyzicene stater in my *History*, p. 241. But some good authori-

ties, such as Mr. J. P. Six, will not allow it.

¹⁸ Mr. Allen B. West in the *American Classical Philology* for 1914 gives reasons for thinking that the league was reconstituted about B.C. 422. Compare my *History of Ancient Chios*, p. 281.

¹⁹ *Nomismata*, No. 2.

the Chian standard is advancing. Amphipolis, which used only Athenian coin until the expedition of Brasidas, began then to strike beautiful coins of Chian weight. Thasos began to issue silver staters on the same standard. Aenus and Byzantium followed suit. Along the whole southern shore of Thrace, the stater of Chian weight became the main vehicle of commerce.

III. B.C. 412-400. With the last decade of the fifth century we reach a crisis in the history of Chios. After the wreck of the Athenian expedition against Syracuse the power of the imperial city was greatly diminished, and the feelings of the Chians towards her were changed. Just after the Persian Wars Chios had been one of the most eager promoters of Athenian leadership. And at first the Chians were among the most faithful of the members of the Athenian league.¹⁹ But as early as the seventh year of the Peloponnesian war their loyalty began to wane. They made a wall round their city which the Athenians, regarding its erection as suspicious, obliged them to pull down.²⁰ In B.C. 412 they broke into open revolt. The Athenians heard of their defection with consternation: they saw at once the direness of the peril, and repealed the law which provided that the sum of a thousand talents set aside as a resource in desperate straits should be kept intact. But though the Athenians could defeat the Chians in the field, and even blockade their city, they were not able to subdue them. They had too much opposition to face in other parts of the Aegean to be able to spare an adequate force. So from B.C. 411 for a time Chios became one of their most dangerous enemies. In that year the Spartan admiral Mindarus, sailing from Chios, procured as pay for his men three Chian silver tetradrachms apiece; and in 400 Callicratidas procured for each of his sailors two tetradrachms²¹ equivalent to five drachms of Aeginetan standard. It is evident that at this time the wealth of Chios was one of the chief resources of the Spartan admirals.

At this time, the end of the fifth century, the Chian standard for silver began to spread rapidly among the cities of the west and south of Asia Minor. Unfortunately we cannot date coins with sufficient accuracy to determine whether this diffusion took place immediately after the revolt of Chios, or after the taking of Athens by Lysander a few years later. If we could do so, we might provide a valuable clue through a very confused period of history, as to which we are dependent no longer upon Thucydides, but upon Xenophon. We should be able to determine, on solid evidence, which cities first threw over the Athenian domination, and how the revolt spread. Some of the earliest cities to go over to the Chian standard were the cities of the Propontis and Mysia, Calchedon, Parium, Assos, Antandros and others. Mr. Head, in his admirable account of the coinage of Ephesus, fixed B.C. 415 as the time after which Ephesus uses the Chian weight; but it is unlikely that the change took place before the revolt of Chios. At Samos, it certainly did not take place until after the fall of Athens, for Lysander was obliged to besiege the city before he could set up there a

¹⁹ Thuc. ii. 9.

²⁰ Thuc. iv. 51.

²¹ *Hist. of Anc. Coinage*, p. 231.

Spartan harmost. Another date is fixed by the accession of Rhodes. That city was founded about B.C. 409; and for a very few years it used the Attic coin-standard, almost immediately going over to that of Chios. At Cyzicus, according to von Fritze,²² the Chian standard comes in in B.C. 405, with the fall of Athens.

The trophy set up by Lysander at Delphi, in memory of Aegospotami, gives us some information as to the composition of the Peloponnesian fleet at that battle. In the trophy were portraits of a number of the captains of Lysander. Pausanias has preserved for us the names of twenty-eight of these. Ten of them were Peloponnesian, seven were from central Greece, three from the Asiatic cities Cnidus, Ephesus, and Miletus. Three were from Chios, two from Rhodes, one from Samos. The Samian captain may have been an exile, but it looks as if Rhodes as well as Chios was openly on the side of Lysander. This would place the defection of Rhodes before B.C. 405. Evidently a great part in the humiliation of Athens was taken by her revolted Ionian allies.

M. Homolle has recovered the foundations and some of the bases of statues²³ belonging to this trophy. The inscriptions on them confirm the statement of Pausanias, except that he states that Theopompus belonged to Myndus, whereas the basis asserts that he was a Melian, a very easy misreading of the inscription.

Something must be said as to the relation between what was now becoming in the Aegean an almost international coinage and the money of Persia, which held its own tenaciously in the districts where Persia was still preponderant. The fall of Athens no doubt added to the power of the great vassals of Persia in Asia Minor, Pharnabazus, Tiribazus, Tissaphernes and the rest. The Persian satraps issued great quantities of silver money in Cilicia, largely on the occasion of military expeditions, at Tarsus, Mallus and other cities of the coast. And it was all, as was natural, struck on the standard of the Persian shekel or siglos, which exchanged at a fixed rate with the gold daric. When the Greek cities of the south coast, Mallus, Soli, Aspendus in Pamphylia, Calenderis, Side, struck coin on their own account, they issued it on the same Persian standard, as did the Greek cities in Cyprus, except Salamis. The Chian weight had no vogue to the east of Rhodes and Caria. This is a dominant and instructive fact.

In the cities of the Euxine Sea, in the same period, the old-established Aeginetan standard is used, even in the case of coins which bear the names of Persian satraps, but the weight of these coins during the early part of the fourth century shews a tendency to fall towards the Persian standard, which is quite 10 grains (grm. 65) lighter. And the important city of Heracleia, which dominated the south coast of the Euxine, under its wealthy tyrants sometimes uses in the fourth century the standard of Persia. At Panticapaeum in the Crimea in the fourth century B.C. we find silver didrachms of Persian weight.

²² *Nomismata*, Part IX.

²³ *Bull. Corr. Hell.* xxi. 287.

That in the districts where Greek and Persian influences were in frequent collision, especially in the Propontic region, attempts should be made to reconcile the Chian and the Persian standards was, of course inevitable. I have already observed that even in the fifth century several of the cities of the Propontis struck for local use small coins, which in some cases follow the Persian and in some the Chian standard. If, as I have maintained, the Persian tetrobol ($\frac{2}{3}$ of the Persian drachm) and the Chian drachm were regarded as equivalent there would be an easy rate of exchange. And it is highly probable that this equivalence held. In that case, though we can still distinguish between the Chian or Rhodian and the Persian spheres of influence, yet the juxtaposition of the two standards would cause but little inconvenience. Eight Chian drachms would be equivalent to five Peloponnesian drachms and nine Chian drachms to six Persian drachms. But though these equivalences may have been normal, yet no doubt in practice there were all sorts of agios and discounts in the various markets which we have no means of tracing.

We owe to the insight of Mr. W. H. Waddington, a numismatist who very seldom made a mistake, the establishment of one of these fixed points which to a student of history are invaluable. Xenophon and Diodorus tell us that, after their defeat of the Spartan fleet at Cnidus in B.C. 394 the Athenian Conon and the Persian Pharnabazus sailed with their ships to the islands and cities of the Aegean, liberating them from the Spartan harposts, but leaving them in autonomy, and not trying to subject them either to Athens or to Persia.²⁴ Among the places thus visited, Diodorus mentions Cos, Nisyros, Teos, Mytilene, Ephesus and Erythrae. As the Greek cities of the coast were continually changing from one dominion to another, these scraps of historic information attracted little attention. But the testimony of coins greatly enlarges our knowledge. From just this period we have a well-marked group of coins issued by Asiatic cities of the coast which bear on one side the inscription $\Sigma\Upsilon\Nu$ and the figure of young Herakles strangling the serpents, while on the other side the several cities place their own name and their civic type. This series of coins demands careful consideration, and it enlightens us in several directions. The $\Sigma\Upsilon\Nu$ stands for *συνμαχία* or *συνμαχισμός*, and beyond doubt indicates an actual alliance, military as well as commercial. The cities known from coins to have belonged to the alliance are Samos, Rhodes, Ephesus, Iasus and Cnidus in Caria, and Byzantium. Since the dissolution of the old Ionian confederacy, after the battle of Lade, there had been no such free league of the Greek cities of Asia. The alliance opened with bright prospects, which were soon clouded by the signing of the peace of Antalcidas in 387. The common type and the common monetary standard adopted by the cities, give us valuable information. The type of the exploit of the infant Herakles is derived from Thebes, at that time beginning to be a formidable enemy to Sparta, and so is definitely anti-Laconian. The weight is isolated among coins of the period. It is 165-177

²⁴ Xenophon, *Hellen.* iv. 8; Diodorus, xiv. 84.

grains (grm. 10.67—11.44). It fits in well with the Persian system, of which it is a didrachm, and with the Chian, of which it is a tridrachm. Canon is praised by Xenophon for his wisdom in not attempting to destroy the autonomy of the Ionian cities; the result was that he and Pharnabazus were everywhere received with open arms, and the Spartan hegemony completely collapsed.

At this time the Chian monetary standard was, as we have seen, fast spreading in the Aegean. That the cities of the League should adopt it was quite natural. But that they should strike tridrachms rather than tetradrachms was very unusual; and the fact can only be accounted for by supposing that a currency which could exchange easily with the Persian daric and siglos was felt to be desirable. Cyzicus and Lampæus adopted the type, though not the coinage of the League, shewing sympathy, though not alliance.

The coins may well also have been regarded as of the value of three-quarters of an Athenian tetradrachm; and these tetradrachms, even after the fall of Athens, must have largely circulated on the coast of Asia Minor, and been usual on the tables of the money-changers. But Chian rather than Athenian influence is clearly apparent from the subsequent coinages of the cities of the League. The alliance coinage lasted but a few years, as is shown by the great rarity of the coins belonging to it; and afterwards, almost all of the cities of the alliance, Rhodes, Cnidus, Samos, Ephesus, and Byzantium, struck tetradrachms not on the Attic but on the Chian standard.

But doubtless, from this time onwards, it is rather the commercial supremacy of Rhodes than that of Chios which promoted the vogue of the monetary system common to the two cities.

The next great success of the Chian standard was its adoption by the powerful satrap of Caria, Mausolus, who, on transferring the seat of his power from the interior to the seaport of Halicarnassus, naturally altered the standard of his coinage, to make it conform to that of the opposite island of Rhodes. He borrowed also from Rhodes his monetary type, the head of the Sun-god. Not much later, the standard was adopted by the people of Cos, who about B.C. 366 imitated their neighbours of Rhodes in founding a new city, and removing thither the people of their towns.

Even Teos, the only Ionian city which had until the end of the fifth century still adhered to the old standard of Aegina, comes in the fourth century into line with the Chian and Rhodian issues. And the great Persian satraps, Tiribazus and Pharnabazus, when they were ruling in the west at Daecyleium and Sardes, issued staters of Chian weight. Some of these M. Babelon gives to the Cilician mints; but if my previous sketch is trustworthy, that assignment cannot be maintained, for nothing but the Persian weight was in use in Cilicia. It seems rather that when these potentates struck money in the west for their own use, or for the hire of Greek mercenaries, they accommodated themselves to the coin-standard there in general use. But when they struck in Cilicia, they used the Persian standard, which

was universally accepted to the east of Lycia. As in the fifth century, so in the early fourth, the spheres of Greek and Persian control were marked by the difference in monetary standard.

When we reach the age of Alexander and the Diadochi, we come to an end alike of the recorded history and of the important coinage of Chios. The island may have enjoyed prosperity under the rule of the Kings of Macedon or of Egypt; but after the city had fallen into the hands of Antigonos, the immediate successor of Alexander, it seems to have lost freedom and the power of initiative.

After the fourth century many bronze coins were issued in Chios, and a certain number of small silver coins, drachms of Attic standard, which worked in with the tetradrachms of the Greek kings of Syria and Macedon. But the only large coins which were struck did not bear the name of the city. Of these I will briefly treat.

After *B.C.* 190, when the Romans had broken the power of Antiochus III. of Syria, Chios, in common with many of the cities of Asia Minor, issued tetradrachms of Attic standard bearing the name and the types of Alexander the Great. It is a curious interstate coinage, the staters of which can be distinguished at once from the coins of Alexander himself by their fabric. They are flat and spread, and bear a subsidiary device to show what city issued them—in the case of Chios, the Sphinx. The timidity which dared not place on these coins any claim to autonomy, but fell back on the tradition of the great Alexander, is remarkable, and shows that there was no longer among the cities and islands of the Ionian coast any courage to attempt, or any resources to carry out, an independent line of policy. These once splendid and energetic communities were thenceforth content to live on the suffrance of Rome, and to accept such degree of commercial prosperity as the aggressive and capacious merchants of Italy would allow them. Mithradates of Pontus attempted in vain to rouse the old Hellenic pride, and when he failed the world-domination of Rome was secure. Chios had to content herself with a humdrum existence, relieved only by the memory that she had been the birthplace of Homer and the seat of the earliest great school of sculpture in marble, that of Archarmus and his sons. Few cities indeed have done so much for the higher culture of the civilized world as Chios, the source of poetry and sculpture—and, I venture to add, of another product closely allied to poetry, honey-sweet wine.

P. GARDNER.

A STAG-HORN HEAD FROM CRETE

[PLATE VI.]

THE curious head which is illustrated, in actual size, on Plate VI, was bought by my colleague, Captain F. N. Pryce, and me from a well-known Greek dealer at Cairo in December, 1918, and is now in the British Museum. It is carved in the beam of a stag's antler, the natural butt or coronet of the



FIG. 1.—BACK OF STAG-HORN HEAD.

horn representing either a crown or curled, upstanding hair, while the longitudinal corrugations imitate hanging tresses. The smooth, round base of the shed antler very aptly resembles the top of a man's head (Fig. 1). All

these features are unworked. The rest of the horn is carved in the shape of a human face wearing a full beard and turned-up moustaches. Across the forehead is a heavy ridged moulding, which runs into the edge of the beard on each side of the face. Whether this moulding represents the band of a headdress, or a ceremonial fillet, or the rim of a crown, or is simply a decorative device to help the transition from the projecting hair to the receding face, it is not possible to decide, for its details will not bear strict interpretation. The hair of eyebrows, moustache and beard is marked with close striations. The left side of the head (Plate VI.) has its surface perfectly preserved, and here the lines of the beard can be seen engraved on the smooth end of the forehead-band. No ears are shown. The nose has been entirely hacked away, but the nostril-holes remain. The eyes were inlaid with black and white substances. The filling of one is lost, the other has the iris of white shell or very hard tooth, the pupil of black glass-paste. The neck is cut for attachment to a cylindrical peg. In its base is a circular boring 1 inch (25 mm.) deep and .8 inch (20 mm.) in diameter; the walls of this are .2 inch (5 mm.) thick, and outside their lower edge is sunk an irregular rebate about .4 inch (10 mm.) wide, which is heightened at sides and back in a double curve very roughly cut into the corrugated surface of the hair. This rim is broken away on one side. The head itself is 4.7 inches (119 mm.) high.

There is no record of discovery beyond the statement that the head was 'brought from Crete about twelve years ago,' and had been in the shop ever since. I have no reason to doubt the dealer's information, for the head was not recommended to us by reason of a Minoan origin; indeed the dealer's son insisted that it must be Turkish. So far as I can find, however, it shows no affinity to any objects of modern Oriental art, and the condition of the material indicates a greater age. The bone is almost petrified. On the other hand it has many points of agreement with Minoan and Mycenaean works, although pieces of sculpture in the round of this period are so few and various and so ill-preserved that no comparison of style need be attempted. Minoan art is still so little known that a work of high importance, indeed the finest carving that has yet been found, the gold and ivory statuette from Cnossos now in the Museum of Fine Arts at Boston,¹ was greeted on its first appearance as a forgery, and when the genuineness of the lady's body is vindicated by high authority, suspicion concentrates upon her head. It is as well to leave style alone at present, and to confine comparison to plain mechanical detail.

The most remarkable feature of the head is the fashion of moustache, and if this were unique, it would never be accepted as Minoan. Fortunately it finds an exact parallel in an object far beyond suspicion, one of the gold masks which Schliemann found in the Fourth Shaft-grave at Mycenae (Fig. 2). The turned-up ends are precisely similar, with points running into the edges of the beard. Another useful parallel from the mask is the

¹ *A. J. A.*: six. (1915), p. 237, Plates X-XVI.

method of marking hair, in beard, moustache and eyebrows. The bare chin of the mask, and the tuft of hair beneath the lower lip, cannot be seen in the horn head. The surface has perished there, but it looks as if the beard covered all the chin. No inlaid eyes of this type have yet been found in Minoan work, though eyeballs of ivory heads are bored for inlay,² but it was a common process in contemporary Egyptian and earlier Sumerian sculpture. The frill of hair (if it is hair) and the hanging tresses are the ordinary Minoan fashion. The 'horns' in which Paris gloried (*κίρα ἀγλαὰς*) were fantastic curls, which were painted even by Egyptian artists in the



FIG. 2.—GOLD MASK FROM MYCENAE.
(From an Electrotyle Copy.)

figures of Minoan envoys in the tomb of Rekhmara.³ The love-locks are best shown on the chieftain of the Chieftain Cup from Hagia Triada. A band across the forehead is worn by a terracotta head from Mochlos,⁴ and by the harvesters of the Harvester Vase. But these have no long hair behind: it was evidently twisted and bound round the head.

² See Fig. 3 below, the bull-fighters from Chania (B.S.A. vii. Plates II-III.); and the helmeted head from Mycenae (Eph. Arch. 1888, p. 136, Plate 8).

³ Hall, *Ancient History of the Near East*, pp. 50 and 293, note 1.

⁴ Seager, *Explorations in Mochlos*, Fig. 21.

The nearest parallel, however, is not in hair, but in certain ceremonial crowns. There is first the crown of the majestic personage from a relief-fresco in a corridor of the Central Court at Knossos, a restored reproduction of which is in the Ashmolean Museum.⁶ It consists of a ring of lilies within which rises a central flower carrying three large plumes; around the head is a heavy moulded rim or fillet. The same form of crown is worn by the priestess carrying buckets on the H. Triada sarcophagus,⁷ but no flowers are indicated, only a ring of spiral coils which come very close to the curls of the antler-burr. The horn head has no central plumes, but it must be borne in mind that it is not a finished piece of sculpture, but a natural object partially worked to enhance an accidental likeness. In spite of consequent shortcomings, the lack of ears, the illogical joining of forehead-band and beard, the indeterminate nature of the crown, and the general subordination of design to shape, the head still agrees with what is known of Minoan fashion and technique.

It has previously been held that the wearing of a beard was a peculiarly Mycenaean custom.⁸ But the old man on the Harvester Vase from H. Triada is bearded, and the funeral masks from Mycenae, though probably made locally, cannot be separated from other objects in the shaft-graves which were certainly made in Crete. These graves mostly contained Cretan products of the period M.M. iii. b, that is to say, they belong to a time too early for the development of a separate Mycenaean civilisation, being indeed the graves of the original Minoan colonists in the barbarous land of Greece. The bearded Mycenaeans elsewhere⁹ have no moustaches, in agreement with early Greek fashion. The moustache, then, may be Cretan, and the head may belong to the same time as the mask which it so closely resembles, that is to say, it is a Cretan work of the beginning of the Late Minoan period, about 1600 B.C. The material is probably not Cretan. The horn is from a shed antler of the red deer (*Cervus elaphus*), which occurs on the Greek mainland¹⁰ but is not known to have existed in Crete.

As to the purpose of this object, it seems plainly to have been the handle of a walking-stick, or in heroic terms, a sceptre-head. The stick would be 1.3 inches (33 mm.) in diameter at the top; its end was let into the socket in the head, and the joint covered with a metal band which fitted into the rebate on the neck. The fixing is naturally the same as that of an umbrella-handle. An ornamental horn is a likely head for a staff, but the sharp edges of this piece, which prevent its being held with comfort, are more suited to the ancient sceptre, which was longer than its modern counterpart. The head shows no sign of rubbing. This use would account for the incomplete scheme of the head. Its function was decorative: the antler

⁶ Hall, *Ancient History of the Near East*, Plate IV. I.

⁷ *Monumenti Antichi*, xiv. (1891), p. 66, Fig. 19, PL. I.

⁸ Hall, *Ancient Archaeology*, p. 242.

⁹ So in the twenty-one gold heads inlaid on a silver cup from Mycenae (Es. *Aeg.* 1888, Plate 7) and on the Warrior Vase.

¹⁰ Lydekker, *The Deer of All Lands*, p. 68.

suggested a crowned head, and a face was carved on it in response to the suggestion.¹⁰

There are no remains of ancient sceptres which are at all like this¹¹ and no sceptre-head has been described by Homer. In classical art sceptres are never represented without heads; these are birds, fruits, flowers or decorative devices. It is not wandering too far from Minoan sceptres to quote Herodotus' description of the Babylonian fashions: 'Everybody carries a seal and a carved staff, and on the top of every staff is the figure of an apple or a rose or a lily or an eagle or some other thing. It is not their custom to have a staff without a device.'¹² A natural horn would be a suitable top for such a sceptre as Achilles had—a sapling with its branches lopped, and studded with gold nails.¹³

This view is helped by the modern decorative use of similar objects. A more serious interpretation is possible, whether the head be regarded as an ornament or as part of a statuette. At a meeting of the Hellenic Society, at which the head was first shown, Sir Arthur Evans put forward the suggestion that the antler might have been so used in a cult-figure of a hunter-god, such as is already known among Minoan religious emblems,¹⁴ the butt of the antler in this case representing horns. As a further development of the same idea, he suggested that the crown of the Boston goddess might also be derived from horns. I asked Mr. L. D. Caskey if the crown regarded from this point of view bears any resemblance to horns or antlers. Mr. Caskey very kindly gave me his opinion, that he could see no such connexion, and sent me a new description of the crown and enlarged photographs of the head, of which I reproduce one in profile (Fig. 3).¹⁵ There may, however, be some reminiscence of the palmate antlers of the fallow deer (*Cervus dama*) in the four curved plates which form the edge of the crown, and more so if the holes which pierce them

¹⁰ I can find no instance of such treatment in classical art. Mr. R. A. Smith (without expressing an opinion) suggests comparison with 'antelope heads'. See W. M. Newton in *Journ. Brit. Arch. Ass.* 1913, 'On Palaeolithic Figures of Flint', called 'Feline Stones'. Dr. G. Macdonald calls my attention to some curious parallels in the same material (antler-burns) of provincial Roman origin. See Carlo, *A Roman Frontier Post: The Fort of Nijmegen*, p. 314, Plate LXXXIV, 14.

¹¹ Schliemann's crystal and gold 'dragon-sceptre' now turns out to be a sword-hilt (Stais, *Coll. Mycenaeae, Guide Illustré du Musée National d'Athènes*, ii, p. 42). The other 'sceptre-heads' from the third shaft-grave, gold and crystal balls, are probably heads of karyatids. This was a women's grave, and contained no weapons. Schliemann was probably right in assigning to sceptre shafts certain gold tubes and studs (*Mycenae and Tiryns*, pp. 203, 205), the best tube or sheath (inlaid with a spiral

stripe in silver with a knob at each end, from the fourth grave (Tsountas and Mannatt, *Mycenaeae*, Fig. 64). Tsountas found several similar sheaths, one in the Vaphio Tomb of bronze with transverse fluting, about an inch thick (*ibidem*, p. 168). A separate head (though not from a sceptre) is the faceted ball of brown and white breccia from the Mano-beaver's Tomb at Chios (Evans in *Archaeologia*, 65, (1913-14), p. 18, Fig. 33.

¹² *Ibid.*, i, 195.

¹³ *Ibid.*, i, 224 ff.

¹⁴ Hogarth in *J.H.S.*, xxi, (1902), 7A; *Zakro Sealings*, Figs. 12, 26. Cf. Hall, *Aegean Archaeology*, p. 268, 'Horne the Hunter', and the Minotaur himself.

¹⁵ As in *A.J.A.*, xii, (1915), Plate XIII. The portion of the crown which puzzles me most is the central excrescence, which when I wrote the article I assumed to have been originally cylindrical. It is fragmentary, and consists at present of two vertical projections.—L.D.C.

be regarded not as rivet-holes (for which indeed they are too large, by comparison with the holes for gold curls in the hair below), but as formal renderings of the curved openings between the posterior snags of the palmations. These holes, which are open at the top, may never have been



FIG. 2.—HEAD OF IVORY STATUETTE AT BOSTON.
(Enlarged.)

closed. The central projections are probably part of the plume, as in the crowns of the fresco Prince and the sarcophagus Priestess. There is evidently close connexion between the head-dresses of all four examples, but its explanation must wait for further evidence.

E. J. FORSDYKE.

AGATHARCHOS.

THOUGH I can hardly hope to justify it, I must record (as having given the impulse to this study) my impression that it was not so much the art of his days, as the theories built thereon, which led Plato to such definitions of the *skiagraphia* as 'essentially servile and devoid of reality and truth,'¹ as 'not altogether true nor pure,'² as 'unclear and misleading,'³ and as 'an inferior coupled to an inferior and producing inferior offspring.'⁴

'A *hed* seen obliquely or directly or from any other point of view will appear different, but there is no difference in reality,'⁵ he says, and further on: 'The body which is large when seen near, appears small when seen at a distance. And the same objects appear crooked when we look at them in the water and straight when we look at them out of the water, and the concave becomes convex owing to the illusion about colours to which sight is liable. Thus every sort of confusion is revealed within us; and this is that weakness of the human mind on which the art of conjuring and of deceiving by light and shade and other devices imposes, having an effect upon us like magic.'⁶

I had long wondered how painters of those ancient days could have been so observant of the laws of refraction that they should have shown the breaking of a line in water, when even in our times so conscientious an artist as Sir Lawrence Alma Tadema gave her full length to a woman standing in clear water. I found the explanation in the Stoic doctrine treating of the phenomena, in the example cited of the semblance of the oar breaking in the sea. Now as the stern of a ship is a commonplace in the paintings of the fifth century, and the double rudder is an unfailing adjunct, we have just a case where the painter could render exactly what he saw, without creating an anomaly. It does not seem unlikely that Apelles afterwards went even further in his swimming Leander, nicknamed probably *monoknemos*, and perhaps also in his Aphrodite *Anadyomenē*. The words of Sextus Empiricus about the different types of *phantasia* are these: 'Those are false whose property it is to create a false impression, like the breaking of the oar in the sea and the curtailing (we should say foreshortening) of the gallery.'⁷

Now it seems evident that the Stoa based the theory of the appearance of the *phantasia* on the observations of Demokritos, whose gifts in this

¹ *Phaedo*, 69 a.

² *Rep.* 523 a.

³ *Critias*, 107 c.

⁴ *Rep.* 603 a.

⁵ *Rep.* 508 a.

⁶ *Rep.* 602 c.

⁷ *Sext. Emp.* vii. 1, 244.

respect are pointed out by our authorities. They even record anecdotes that seem more appropriate to some Sherlock Holmes than to the philosopher who excoagitated the theory of the atoms. He himself refers to a predecessor, Xenias, for the fallaciousness as well of appearance as of opinion.⁸

But this did not hinder him in studying these phenomena, and we know from Vitruvius⁹ that he and Anaxagoras wrote about the first law of linear perspective, the radiate retreating of parallels to the point of view. And as in what we know about Anaxagoras nothing else is to be found that could point to the art of painting, and his interest here seems to have been purely mathematical,¹⁰ I turned to Demokritos in the hope of finding something more about his interesting theories amongst our fragmentary pieces of evidence.

I was not long in learning that he wrote an *Ἀκτινογραφία*,¹¹ and that the Greeks under this heading used to treat of perspective, as may be seen in Euclid, the fragments of Damianus and the excerpts of Geminus.¹² But there was more. Diogenes¹³ further cites among his works not only treatises *περὶ αἰσθησέων*, *On Perceptions*, but also *περὶ χροῶν*, *On Colours*, and *περὶ ζωγραφίας*, *On the Art of Painting*. Of the last, unfortunately, all seems lost. It is the more to be appreciated that we have what must be a rather extensive, though not exactly sympathetic, extract of his theory about the colours in Theophrastus' book on the senses.¹⁴

We know from elsewhere that our philosopher denied the material existence of colours, establishing that their appearance was an effect due to different properties of the elements.¹⁵ It seems probable that the classical example of the Stoa, 'the pigeon's neck in movement'¹⁶ is due to him, though we lack authority for the supposition. Our full text reads thus: 'Demokritos says that by nature colour is nought, the elements being neutral as well the full as the vacuous; that mixtures of these are coloured by array and by rhythm and by situation, whereof this is order, that form, the other position, and that thus from these are the impressions. That from these colours of the impressions there are four varieties of light and dark, warm and pale.' It is thus we have to translate λευκόν (white) by light, μέλαν (black) by dark, ἐρυθρόν (red) by warm and ὀχρόν (ochre-coloured) or rather

⁸ *Id.* vii, 1, 389.

⁹ Vitruvius vii, 11. Namque primum Agatharchos Athenis Anachyle docente tragediam waenam locit et de ea commentatium reliquit: ex eo mox et Democritus et Anaxagoras de eadem re scripserunt, quem ad modum oportuit illi aciem oculorum radiarumque extinctionem certe loco, vestris commentis lineas ratione naturali respondere, uti de certa re certas imagines aedificiorum in sensorum picturis residerent speciem et, quae in directis planisque frontibus sint figurata, aliis abscedentia; aliis prominentia esse viderentur.

¹⁰ Proclid. ad Euclid. ii, p. 19 (ed. Basil).

¹¹ Diog. Laert. ix, 48.

¹² Delbrück, *Beiträge zur Kenntnis der Liniensperspective in der griechischen Kunst*, p. 42. R. Schöne, *Damianus Schrift über Optik*, passim.

¹³ *Id.* 40-48.

¹⁴ 73 ff.

¹⁵ Diels 125, Ant. 75, 8 (II, 314) = Stob. *Eclog. Phys.* i, c. 17, p. 364. Διαικόντοι ποσὶ αἰε μελλοῖσι εἶναι χροῶσι: τὰ μὲν γὰρ στοιχεῖα λευκά, τὰ ἐκ ταυτῶν καὶ τὰ κερύει τὰ δὲ ἄλλα ἐκ συγκατάθεσιν καὶ ἀνάθεσιν διαταγῇ καὶ καὶ ῥυθμῷ καὶ ἐκ θέσεως, ὥς ὃ μὲν ἐστὶ τὰ λευκὰ τὰ δὲ ὀχρὰ καὶ τὰ μελανὰ καὶ τὰ ἐρυθρά. ταῦτα δὲ τὰς ἐκ τῶν ποικιλιῶν χρομάτων εἰρησύναι αἰσθησέων.

¹⁶ Diog. ix, 86 (Pyrrhon).

χλωρόν, as Theophrastus has it, by pale. Demokritos is not the first to make this division of colours, but only follows Empedokles and the Pythagoreans,¹⁷ and it is evident that as we do not translate ὕλη by wood, where the philosophers have given this word the more general sense of *matter*, so we have no reason for misunderstanding where they make a similar use of terms, that originally designate a special colour. There is, it seems, but one circumstance that has prevented students till now from seeing the truth in this matter, that is that the great painters of the fifth century and even later seem to have had a preference for a scheme of red and ochre, black and white, a reduced choice of colours not dissimilar to that of El Greco or Nicolaes Maës, the Greek aspect of which we may know from several white-ground *kyklos*¹⁸ and a few other vases.

But though the work of these artists may have had some influence in the choice of the philosophic terms, and perhaps in inducing the writers on art to overlook as unimportant the exceptions to the general principle, which did not fail in the paintings they had in view, there is every reason to distinguish clearly between the philosophical terms and the pigments of the painters. Demokritos does not speak of the white Melian earth of the artists but, according to Theophrastus,¹⁹ says that white is smooth because what is not rough neither gives shade nor is impervious, and that the like is all bright. So the bright must be permeable and pellucid. And he goes on to expound this theory. Then, treating of the black (not the *trygionon*, the blue-black colours made of the sediment of wine), he explains²⁰ that black comes from the opposite, the rough and uneven and unequal, casting shades, neither the pores nor the passages being straight, and so on. Yet we shall find that his black is practically a very dark blue and may stand for the group of colours which we would arrange around blue. Red further is not to him the Sinopic earth, considered as the finest vermilion, but 'the red,' he says,²¹ 'consists of the same as the warm with the exception of the hottest.' And he goes on to show that we get red when we grow hot, as does iron in the fire, if this is not too intense.

Lastly he passes in silence the Attic ochre, but gives an all too short exposition,²² that lies open to the criticism of Theophrastus,²³ of how the pale originates from the solid and the vacuous, though we shall find that he does not think of grey but of the yellow group. After having thus explained the nature of his four simple colours he goes further than we know any of

¹⁷ Edm. Vockstedt, *Geschichte der griech. Farbenlehre*, p. 5 (Stob. *Rel. phys.* I. 17. p. 364) and p. 7 (Plut. *Plac. Phil.* I. 15).

¹⁸ *J.H.S.* xvi (1896), Pl. IV : xix. (1899) Pl. II., *Epheia*, 1886, Plin. 4, 1965, Plin. I. W. Bieder, *Wandgemälde aus Leptis*, Taf. 4a, 44a : *Bonner Studien*, Taf. XII.

¹⁹ Theophrastus, 73 : ὁλευθε μὲν οὖν εἶναι τὸ λεῖον. ἡ γὰρ δὲ μὴ τραχὺ μὲν ἀκαταμύχνη μὲν ἐνοβόλος ἢ τοῖσιν οὖν λευκὴν εἶναι. ἀπὸ δὲ καὶ τοῦτέστι καὶ λευκὴ τὴ λευκὴ εἶναι.

²⁰ I.c. 74 : τὸ δὲ μέλαν ἐκ τῆς λευκότητος ἐκτραχίως καὶ καταμύχνης καὶ ἀνοβόλου οὕτω γὰρ δὲ καταμύχνη καὶ οὖν εἰδὲς εἶναι τοῖς πόροις εἰδὲς εἰδόμενα, κ.τ.λ.

²¹ I.c. 75 : Ἐρυθρὴ δ' ἐξ ὁμαλῆς τῆς θερμῆς, λευκὴ δὲ ψυχρῆς.

²² I.c. 76 : τὸ δὲ χλωρόν ἐκ τοῦ στερεοῦ καὶ τοῦ κενοῦ συνιστάται, κ.τ.λ.

²³ I.c. 82 : Ἀποταί δὲ καὶ τὸ χλωρόν μὴ ἀνοβόλου μὲν εἶναι ἀλλὰ μέλαν ἐκ τοῦ στερεοῦ καὶ τοῦ κενοῦ ποιεῖν, κ.τ.λ.

his predecessors to have done in expounding the composition of the other colours from the elementary. So the colour of gold and bronze consists of white and red, having its brightness from white and the ruddy from the red, the red falling by mixture into the interstices of the white.²² It is apparent that our author no longer deals in theory, but speaks here of mingling pigments. The fact grows more evident when he adds that 'the most beautiful colour is obtained by adding some pale, more or less according to the need.' We might hesitate at the first prescription, if we did not know those South Italian vases on which metal shields and helmets are practically painted in red and white. And we shall find no difficulty in understanding that he²³ composes purple of a larger proportion of red, a trifle of black and a middling quantity of white.

But our wonder is aroused when we learn that he wants to compose the blue colour of the woad (*Isatis tinctoria*), wherewith the ancient Britons used to paint themselves, 'from black principally and pale colour, with a larger part of black,'²² and look green of this same woad (blue) and purple, or of pale and purplish,²³ adding that 'from the same is the colour of sulphur,'²⁴ that is to say pure yellow. And our astonishment is not abated if some of the following analyses are either easier to understand or manifestly wrongly rendered. It is evident that, however bluish may be the nature of the black pigment in use, if you dilute it with whatever yellowish colour you like, be it real ochre or even a more greenish matter, you can never have blue, but only some sort of green and that, even so, mixing blue with purple is as unable to give green as ochre (*chloron*) with a purplish colour, or something similar, to give pure yellow. It is no wonder that Plato, explaining the colours nearly in the same way, mixes black and white to obtain blue.²⁵

I have long been at a loss to solve this difficulty, though I think that I have at last found the way out. As we have to make a digression before we come to the conclusion, we cannot leave this subject without noting that Demokritos, in one instance at least, clearly refers to the work of the painter when he mentions that 'dark blue is on rounded and spirlike forms in order that the gloss may be shown in the black,'³⁹ that is to say that the lights on black objects are painted in dark blue. This may remind us of the demon of decay in Polygnotos' Nekyia whom Pausanias describes

³⁹ Ε.Ε. 76: Οὐκ τὰ μὲν χρῶμαί τε καὶ τὸ τοῦ χαλκοῦ καὶ τὰς τὸ τιθέντες ἐν τῷ λευκοῦ καὶ τοῦ εὐθυμῶν τὸ μὲν γὰρ λευκότερον ἔχει ἐν τῷ λευκοῦ, τὸ δὲ ἐπὶ μέρει ἀπὸ τοῦ εὐθυμῶν· πικρὰ γὰρ αὖτε τὰ ἐν τῷ λευκοῦ τῇ αἰσθ. τὸ εὐθυμῶν· ἅς δὲ προστίθῃ τοῖσι τὰ λευκὰ γίνονται τὰ πάλαισι χρόα; οὗτοι δὲ μέρει τοῦ λευκοῦ τὰς ἀσχημονίας εἰσι· . . . ἀσχημονίαι δ' ἐστὶν αἱ καὶ καὶ πλεονεξία καὶ εὐθυμῶν λευκότερον.

ἢ Ἐ. 77. Ἐὰ δὲ περιφρονῇ τε Λευκὸς καὶ μέλανος καὶ θουρῶν, πλείστην μὲν αἷρας ἔχοντες τοῦ θουρῶν, μικρὰν δὲ τοῦ μέλανος, αἴσθη δὲ τοῦ

19. 11. 2014

10. The 3 letters in column three are
not shown, which is shown by the column.

Ε.Ι.Ε.: Το Αι σπέρματε εσ σπογγισμὸς καὶ πῦρ
καὶ ἄνεμος, ὁ δὲ χυμὸς καὶ τοσφινεὶσθαις.

⁹⁸ I.e.: tā yān shìcái ānmǎi róngqūan gāi wéixiàng
tān ānyuē.

²⁵ Τὴν 08.11 : ἡμερὰς δι' ἡμεῖς ἐξελθόντες καὶ εἰς ἑτέρας ἐπισκοπὰς τοιαύτων νεμεσίων χροῖας ἀποτέλεται, οὐκ ὅτι δι' ἡμᾶς ἀποκαταστάσειν εὐνοίας.

²⁰ Theophr. *Ec.* 77: τὸ δὲ σπασμὸν—ἐκ τῶν
μάτων δὲ περιφερῶς καὶ διαλαττοῦσας ὅπου τὸ
πύλας τὸ μέλαν ἐστ.

as having the colour of the flies that spoil the meat. It certainly confirms what we observed about metallic objects such as helmets and shields being painted in white and red, and teaches us that these colours were laid down beside each other, not mixed.

Plato, as we have seen, has a similar theory and he often seems to be in accordance with or reacting tacitly from Demokritos. The ancients have expressed their wonder, that he never even mentions his name, though we may safely conclude that his theories were not directly known to him, for the sage from Abdera himself declared: 'I went to Athens and nobody knew me.'²¹ So if there is no direct relation, we must look for indirect influences, and it so chances that there is an invective of Plato against art which may help us. I have passed it on purpose to bring it forward here. The painter, he says,²² brings forth a world 'in a short time and at little cost.' Now painting was not generally thought such an expeditious art, and the only painter we know of anterior to Plato, who boasted of his rapidity, and is said to have been rebuked for it by Zeuxis²³ in his old age, about the time he had been decorating the house of Alkibiades, is this self-same Agatharchos. He was the first to see laws of perspective, and to write upon them so as to attract the attention of Demokritos, as we have seen.

We know little about his work, but the fact that he made certain observations when painting a scene for Aischylos, may show us our way. Scenes to be convincing ask for a peculiar handling by the decorative painter, as well in the perspective of line, as in rapid strokes of the brush, and especially in vividness of colouring. Our modern decorators obtain this by liberal use of complementary colours, using, for instance flaring red strokes to enliven the green of shrubs and trees. Now if Agatharchos should have made some such observations (as is not incredible if we consider the fact that the brightness of the red in the mane of a marble horse,²⁴ on the Akropolis of Athens, is enhanced by blue intervals) we may hope to explain how, on what he had found, Demokritos could have built his theory. He could thus know that ochre, which is a complementary colour to blue, would give to black a blue tinge, and he would have had the more occasion to make this observation if the black pigment in use were, as it practically was, a dark blue. Even so the slightest hue of greenish in the blue of the wood or the colour, whatever it may have been, used for the *chloron* would turn more towards green if supported by complementary purple; a cooler violet would turn a yellow colour brighter. The anecdote is well known how Delacroix discovered this truth anew, when, despairing of giving its value to a yellow drapery, he went to consult Rubens at the Louvre, and was struck at his own door by the effect of the sunlight shining on a canary coloured cabriolet, which taught him to enhance his yellow folds by violet shades.²⁵

Pliny, who often has such excellent sources, giving in a few words the quintessence of an artistic principle, tells us that the painters used (pure)

²¹ *Diog. Laert.* ix, 30.

²² *Sophist*, 223 a.

²³ *Plat. Periér.* 12.

²⁴ *Dickins, Cat. I.*, no. 306.

²⁵ C. H. Strachan, *A History of French Painting*, p. 203.

colours exciting each other (evidently complementary) before they came to mixing them to transitions: *Tandem ex ars ipsa distinxit et invenit lumen atque umbras, differentia colorum alterna vice sese excitantes, postea deinde adjunctus est splendor, alius hic quam lumen; quod inter hæc et umbras essent, appellarunt tonon, commissuras colorum et transitus harmonen.*²⁷ Now this latter stage corresponds to the art of Zeuxis and his master Apollodoros ὁ σκιδυραφός,²⁸ and as we know this word does not mean so much shadow-painter as painter of perspective, σκιδύραφος²⁹ and as we find an authority as Aristotle³⁰ tells us that it was Sophocles who introduced the *σκηνογραφία*, the painting of scenes, into tragedy, it looks as if it must have been Apollodoros who painted the scenery for him.

So Agatharchos, who before that painted a scene for Aischylos, must have preceded him in observing the laws of linear perspective, and must have been the painter who first used complementary colours to obtain the effect required by this art.

It is in vain that I have looked for traces of this principle in the antique paintings that have come down to us. Still it is hardly possible that the method, so wonderfully handled by Piero della Francesca, Michel Angelo and large groups of most modern schools, should have been quite unknown to the ancients. The marvellous head of a cherub in St. Maria Antigua, dating from 765 A.D.,³¹ which looks so rosy, though modelled in light sea-green with a few patches of brown-red, does not stand quite alone, and the monk Theophilus gives a general receipt for painting flesh on a layer of green.

I have no doubt that a closer research than I could make, in remains of ancient painting, will reveal traces that escaped me. I need hardly add that neither Agatharchos nor Demokritos can have thought of mixing pigments to obtain such results, but of the nature of things producing by diverse combinations of simple causes very different effects. The opalising in purple and green of the pigeon fits in exactly as the example we desire.

Now as this first scene of Agatharchos marked an epoch, we must expect, considering the coherent evolution of Greek art, to find reminiscences of his perspective in the Attic works of the fifth century. The reliefs of Trysa, also, so rich a reflection of the art of the great painters of those days, will most probably not fail to contain them.

What we find here is a palace or a temple in the rape of the Leukippids and another in the besieged city,³² but much more prominent are the towers

²⁷ N.H. xxxv. § 20.

²⁸ Pfuhl, 'Apollodoros ὁ σκιδυραφός,' *Zeits. f. Kunstgesch.*, xiv. (1910), p. 12 ff.

²⁹ *Ibid.* iv.

³⁰ Wilpert, *Die rom. Mosaiken und Malereien*, Taf. 156.

³¹ Bandheff, *Das Herosion von Gellabachi-Trysa*, Taf. XII., XXII.; Joseph Wilha, *Freiwilleige von Herosion in Gellabachi-Trysa*, Taf. 10 and 5-8; Bruun-Bruckmann, *Denkmäler Gr. u. R. Sculptur*, no. 496. My son Gips, who studies architecture, made this figure for

me from Bandheff's plate corrected by the photograph, indicating in broken lines what could be restored with certainty or was most probably indicated by painting on the original. Studying the exact focus of the skulpture in the temple, his attention was drawn by some forms in the tympanon. As he had sketched them I could not fail to recognise the bust of a winged figure, arabesque in form, some Nike, or that of Anubis, or a Gorgon, as in the temple of Cora.

and the town wall in front and beyond (Fig. 1). I do not want to lay stress

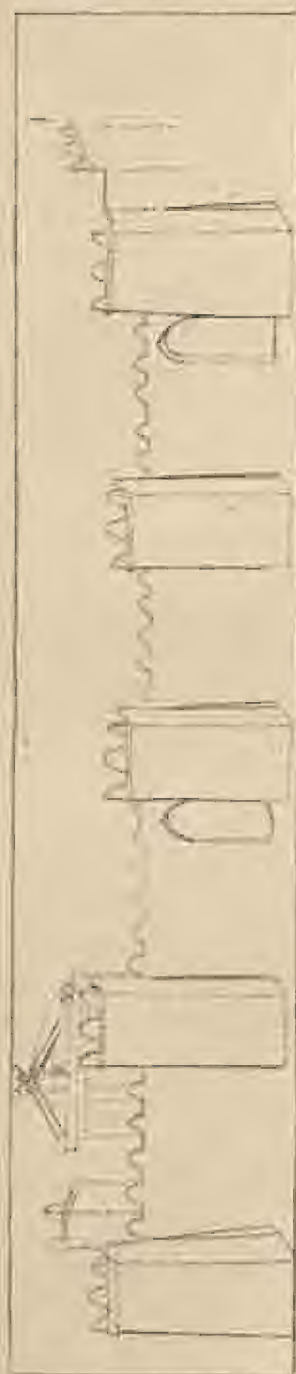


FIG. 1.—TOWN WALL IS THE POWER OF THE HANDS OF THE

on the coincidence that next to the 'fore-shortened gallery,' which is what a classic temple will show when seen from the side, the Stoic doctrine treats of the tower in the distance, because what is pointed out is that it seems round, even if it is square, and this effect fails in the Lycian frieze. What I do want to lay stress on, is the evidence which Aeschylus himself affords in regard to the scene which Agatharches painted for him. Neither the *Vita Aeschyl* nor Cramer's *Anecdota Parisina* gives more than generalities, but I was not long in finding that Reisch,⁴ had picked up the clue. He draws attention to two passages in the *Seven against Thebes*, v. 549, where Eteocles points to the towers:

Πύργοις ἀπειλεῖ τοῖσδ' ἂ μὴ κραίνοι θεῶν,

and 822-4, where the chorus prays: 'O great Zeus and deities, occupants of the town, shield these towers of Kadmos!'

ὦ μεγάλε Ζεῦ καὶ ποταυῶχοι
δαίμονες, οἳ δὴ Κάδμου πύργους
τούσδε ρύσαθε.

And he concludes thus: 'Da uns aber schon für 458 ein entwickelter Palastbau als Schmuck des Spielplatzes bezeugt ist, so wäre nicht ganz undenkbar, dass auch in den Sieben neun Jahren früher bereits wirkliche Türme aufgebaut waren,' etc.

He must be right in the main that the towers—and we may add the walls and gates—of Thebes stood out as a background to the chorus and to the dialogue of Eteocles and the messenger, but when he supposes them to have been built, this is somewhat ambiguous. We will of course have to assume that they were erected in the same kind of materials as a tent, whence the name *σκήπη*, but as a flat screen cut out and painted, so as to give the illusion of the

⁴ In Körpfeld and Rauch, *Das griechische Theater*, p. 197.

towers which defend the town wall, standing out against the sky much in the same way as on the frieze of the besieged town in the Heroon at Trysa. And if we read the tragedy once more with this insight, we shall not fail to find other places that grow more pregnant in their meaning. The chorus says (v. 240):

ταυτ' ἐς ἀκρόπολιν,
τίμιον ἔδος, ἰκόμαν.

How amazing must have been the first sight of it to the Athenians, who had never seen the like, and by what a glorious undertone it must have sustained the words of Eteokles in the prologue, when, concluding his appeal to the citizens of Thebes he bids them 'hasten to the battlements and the gates of the towers' and: 'be not downhearted, lingering on the outlets of the gates' (v. 30 ff.):

ἀλλ' ἐς τ' ἐπαλξεις καὶ πύλας πυργωμάτων
ἁρμάσθε πάντες, σοῦσθε σὺν παντευχίᾳ.
πληροῦτε θαυμάσια κίπτι σέλμασι
πύργων στάθῃτε, καὶ πολλῶν ἐπ' ἐξόδοις
μένοντες εὖ θαρσύνετε.

Let us not forget that the walls which Themistokles began after the sack of Athens by the Persians were not complete until in 465 Kimon restored the southern wall of the Akropolis out of the prize-money of the battle at the Eurymedon, and so brought the fortification of Athens to completion.¹² So we shall not only appreciate the more this tragedy as a song of the wall held against a sevenfold enemy, but see more clearly how cleverly devised the pageant of a town wall was for the festival of Dionysos, whose sacred precinct lay at the foot of the slope on which still gaped the wound that the Persians had inflicted. Those who have seen Royce's scenery to Shakespeare's *Twelfth Night* will not doubt of the artistic merit.

Shall we say that Aristophanes alludes to this scene when the chorus in his *Frogs* thus invokes the poet (v. 1004):

ἀλλ' ὦ πρῶτος τῶν Ἑλλήνων πυργώσας βήματα σεμνά.

I doubt the coincidence, though further on Aischylos himself first speaks of this tragedy (v. 1021):

δρᾶμα ποιήσας Ἀρεως μεστὸν.

Dionysos: ποῖον;

Aischylos: τοῦ ἐπὶ ἐπὶ Θόβας.

Still, it would well fit the style of the comedian to suggest to the people of Athens the memory of the first scene erected some sixty years ago, of which their fathers must have told them, and when they expected to hear of towers of painted lathwork to turn to metaphor and say: 'of lofty words.'

¹² Ant. Leick. *Topographie von Athen*, p. 79, Plat. *Kön.* 13. 6.

We cannot of course know exactly how Agatharchos disposed his wall and gates and towers of Thebes behind the orchestra, but I for my part would suspect that what he showed was not much different from what we have in the besieged town in Lycia and that even his towers, just as at Trysa, may have had each its own perspective, not one in common. The alternative is a very similar, but erroneous, contrivance which is seen in the foremost of the five walls of the Athens of Theseus in a Pompeian painting⁴⁵ (Fig. 2). We



FIG. 2.—THESEUS AND PERITHOUS BEFORE THE WALLS OF ATHENS.
(From a Pompeian Wall-painting.)

still use his method in painting panoramas, giving all objects their own linear perspective. The Campanian wall-decorations of Man's 'First Style' follow the same system,⁴⁶ and with good reason, on account of the short distance at which they were seen. Such was certainly not the case in the

⁴⁵ *Arch. Zeit.*, 1870, Taf. XXXVI, 1.

⁴⁶ *Malerei in Pompei*, Taf. III, Casa del Labirinto.

Athenian theatre. But as the spectators had to see the screen from such very different distances and heights, and at such divergent angles, it still seems probable that an average rendering of the foreshortening would best suit the largest number of people in the theatre. I doubt not that unsophisticated ancient fancy would have been serenely content with this contrivance. There certainly lived in Athens no Demetrius to claim that Eteokles and the maids of Thebes should be within the walls, as in the *Midasian Night's Dream* he wants the man in the moon to be in the lantern.

Years ago some friends and I, then schoolboys, painted scenery to the *Merchant of Venice*; and we were much, and not agreeably, surprised, when it was set up, to find the effect so very different from our intention. We saw our error, but had not to find the remedy ourselves. Must not Agatharchos have learnt a similar lesson when he first erected the towers which he had painted, and saw them standing out on the deep blue sky of Athens? And is it not likely that this decorative art, by its size and by the distance from which it had to be seen, from the very first forced him who practised it to broad painting, and to an emphasis of colours as in the gaudy raiment of the theatre and its exaggeration of gesture and expression?

It is more than credible that Aischylos in 467 found the young Samian painter willing and able to create his fruitful innovation, such inventions mostly falling within the scope of an artist in his prime. If we assume that Agatharchos was born about 490 we shall probably not be far amiss. He would then have been over sixty when Alkibiades held him imprisoned in his house for four months to compel him to paint a decoration which he was not willing to execute.⁴⁰ I assume that Brunn and Overbeck are right in dating this affair about the 88th Olympiad (428-425 B.C.).

As to the nature of this latter work, the oldest house decorations at Pompeii, though their style is based on the same perspective principles, are perhaps rather too late to teach us. I would expect some simple perspective contrivance like an open door. Let us hope that some fortunate find of Greek house-ruins or Etruscan graves may give us new light in a case that seems hopeless.

At all events the fame of Agatharchos will live, not by the work of his after years, however much sought for his decorations may have been, but by what he created in the freshness of his youth, a scene that lasted one single day, but revolutionised art for ever, and probably even altered in time our vision itself.

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⁴⁰ *Antioch. v. Alkibiad.* 17, Demosth. *v. Meidias*, 147, with the scholia. *Phil. Alkibiad.* 11.

A NEW PORTRAIT OF PLATO

[PLATES VII, VIII]

FROM the Renaissance onwards efforts have been made to discover the portrait of the thinker whom even his contemporary Isocrates called the 'prince of philosophers'.¹ At that period it was believed that it had been discovered in a venerable long-bearded male type, a view which Fulvius Ursinus thought to be supported by a gem inscription. According to this there was no longer anything to prevent the ascription of the name Plato to a whole series of Olympian heads, now acknowledged as being of the type of Dionysus or of Hermes.² And when the bronze bust of the Indian Dionysus was found at Herculaneum in the beginning of the eighteenth century, it was greeted with enthusiasm as the most expressive portrait of the great intellectual hero, and passed as such in popular works right down to the end of the nineteenth century. Even in the beginning of this century an Italian archaeologist tried to save the name of Plato, and proposed to explain the bust as a combination of Plato and Dionysus.³

But at the beginning of the nineteenth century science was already on the track of the representations of Plato. Visconti brought to light a little bust with inscription at Florence, representing an elderly bearded man with high bald pate and a ribbon in his hair, but the inscription proved to be spurious.⁴ A more valuable discovery was made by E. Braun in 1839 in a sculptor's studio at Rome of a plaster cast of an antique statuette representing a seated man, which on one side of the seat bore a reliable ancient inscription - ΠΛΑΤΩΝ. Though later it became clear that the head was modern, yet this little figure gave a statuesque type of a portrait of Plato, the original of which has not yet been discovered.⁵

In 1884 the iconography of Plato secured a solid foundation in an inscribed Herm from the collection of Alessandro Castellani, which was acquired by Count Tyskiewicz and presented to the Altes Museum in Berlin.⁶ The

¹ *Antiloia*, 261.

² A survey in Bernoulli, *Historische Iconographie*, II, 18.

³ Braun-Bruckmann, 382; *Wanda Rausch*, 867, with literature; cp. Bernoulli, *op. cit.* 25, n. 1. Cp. the replica, *Ann. Mus. nat.* 1910, 166, figs. 21, 22.

⁴ Bernoulli, *op. cit.* 21, f. 2.

⁵ Latest reproduction in Lippold, *Griechische Porträtstatuen*, 65, f. 1. See also Bernoulli, *op. cit.* 21 and 25.

⁶ Holbig, *Arch. Jahrb.*, I, 1887, p. 71, Pl. VI. Arnlt-Bruckmann, *Portraits*, Pl. V. Bernoulli, *op. cit.* 20, Pl. IV.

genuineness of its inscription was indisputable, and with the help of this head, which was in itself insignificant and in bad preservation, Holbig succeeded in pointing out six replicas, to which Bernouilli added four others. An eleventh head, which has suffered much, I noticed in the Museum at Syracuse (Museum number, 714; Pl. VII.). A head in the Museum at Sparta is certainly a portrait of the philosopher; not, as the authors of the catalogue think, a 'Platonist'.⁷ As the thirteenth replica must be added the head in the Ny Carlsberg Glyptothek, acquired in 1910 from Countess Cellere of Centocelle near Rome.⁸



FIG. 1.—THE VATICAN BUST OF PLATO.

All the replicas are Roman copies of the first, second, and early third centuries A.D., and their variations from one another are not so great as to exclude a common original. The earliest, best executed, and also probably the most trustworthy of the replicas is the Herm of the Vatican, with the

⁷ Todt and Waser, *Catalogue of the Sparta Museum*, 128, fig. 24.

⁸ Hekler, *Greek and Roman Portraits*,

Pl. XXIII. Described by Lippold, *op. cit.* 56, n. 1. Ny-Carlsberg Glyptothek, Appendix to Platon, Pl. VII, 1154.

modern inscription Zeno (Fig. 1).⁹ The head is quite individualised, with the broad furrowed forehead, the long heavy beard, and the calm, rather peevish expression, which seems to justify his enemies when they maintained that the philosopher was *δυσχερής πρὸς πάντας*.¹⁰ But the characteristic element in the features is combined with a typical element, which caused Helbig from the first to compare the heads of Greek grave-reliefs, a point enforced and carried further by later writers.¹¹ A series of heads of venerable old men from Attic grave-reliefs of the middle of the fourth century can really be compared to this type of Plato.¹² Thus the original, to which all the copies go back, is dated to Plato's lifetime or the year of his death. It shows the same fully-mastered characterization, which we are familiar with in the grave-reliefs of exactly that period. Only twenty years later do the old men of grave-stelae begin to show more individual countenances, with the forms and furrows that wisdom, pain, or merely weariness leave when life is drawing to a close. The best that can be said of this Plato is that he reminds us of the calm and handsome old men on grave-stelae.¹³ But it is neither Plato the thinker, nor Plato the writer; neither the seer inspired by Apollo, nor the teacher who drew animated youth to his Academy; neither Plato with the strong passion of the dialogue *Gorgias*, the work of his early manhood, nor the Plato who in his last work defended wine and feasting and recommended his successor Xenocrates not to forget to sacrifice to the Charites. It is well known that Heydemann wrote the following condemnation of the best copies, the Vatican Herm, before its naming had been made certain by the signed replica at Berlin: 'A physiognomy not very intelligent, suggestive of Philistinism, which seems to be against its attribution to a philosopher.' The latest and most powerful expression of dissatisfaction with this likeness of Plato has been uttered by Wilamowitz when he asserts: 'Es kann gar nicht anders sein als dass sich mehr Platonbildnisse erhalten haben; die Archäologen wissen nur Umschau halten.'¹⁴

During my tour round a number of English country-houses in August and September, 1919, the object of which was to study and photograph ancient portrait sculpture in private hands, I found in the smoking-room at Holkham Hall a Herm bust which immediately struck me by its individuality,

⁹ Bernoulli, *op. cit.* Pl. V. Arndt-Bruckmann, 778; L. Helbig, *op. cit.* Pl. XXII. With respect to the other replicas in Bernoulli (p. 27), No. 2 is reproduced. Stuart Jones, *Musée Capitolin*, Pl. LVI and LVIII.; No. 6 in Arndt-Bruckmann, 778; No. 9 in Arndt-Ameling, *Kunstausführungen*, 1402, and in Esplanadien, *Revue générale*, II, p. 432.

¹⁰ Athanasius, xi, 500 a. = p. 597 a.

¹¹ Winter, in *Museon* (p. 66), compares with the head of the old man on the tombstone of Procles and Procleides, Coma, *Griech. Denkmalg.*, Pl. CXLI (= Arndt-Ameling, *Kunstausführungen*, 681-2). It is reproduced by Helbig, *op. cit.* xiv, and by

Collignon, *Statues féminines*, 152.

¹² Coma, *op. cit.* Pl. CCLXV. 1298 a, CXXV. 634, LIN. 339 (Miltades, cf. text, p. 54). Collignon, *op. cit.*, 143.

¹³ One can form an idea of the beauty of the original by the help of a head from a grave relief at Trieste, Arndt-Ameling, 585; cf. heads on gems, e.g. Furtwängler, *Griech. kleine Skulpt. im Berlin. Antiquarium*, Pl. XXXVI, 5020. Even in Theophrastus' time (c. 320 B.C.) it is the highest flattery to tell a man that his portrait is a likeness (Cicero II, 12), i.e. that he is as handsome as his portrait.

¹⁴ Wilamowitz-Moellendorf, *Platon*, I, 763.

and in the head of which I very soon recognised a new portrait of Plato.¹⁵ I reproduce the Herm after photographs taken separately by Mr. R. B. Fleming and Lord Coke, and take this opportunity of thanking the last-named and Mr. C. W. James for the interest they showed in my work. I also owe great thanks to the Earl and Countess of Leicester for the special hospitality of my reception during my studies at Holkham Hall.

In the Herm (Plate VIII. and Fig. 2) only the head and neck are



FIG. 2.—BUST OF PLATO AT HOLKHAM HALL.

antique; they are joined, with the cut edge showing, to a modern Herm, on the left side of which is incised in Greek and Latin letters the name Lysias. The height of the head from the crown to the tip of the beard is 33 cm. The tip of the nose and part of the left ear are restored in marble. The surface is much destroyed, weathered, and worn, particularly the mass of hair on the left side and at the back is worn quite smooth. The marble has turned very yellow.

¹⁵ A. Michaelis *Antiqu. Hebrææ et Græcæ*, 317, n. 48. Beusoltz, *op. cit.* II, 2, who reports with incredulity the judgments

of Ouse and Michaelis that the head is really a portrait of Lysias. The Herm was bought by Böttgering in 1752 for 40 crowns.

The deep and disintegrating boring of the beard proclaims that the head is a Roman copy of the second century A.D. But no connoisseur of Greek iconography will doubt that the original was a portrait of the fourth century B.C.

The resemblance to the Plato portrait already known is unmistakable. It appears in the shape and fall of the hair over the forehead, in the broad forehead with the identical treatment of horizontal and vertical wrinkles, in the lines of the moustache and the breadth and length of the beard. But small variations give a fresh aspect to the previously known features: the forehead wrinkles seem to vibrate menacingly, one forehead lock is arched, the lines of the moustache crackle like lightning, and in the cheeks life and suffering have ploughed deep furrows. Enough of the nose is preserved to show its shape, curved and narrow-ridged with a deep depression at the root. It is a well-shaped aristocratic nose and quite individual, not broad-ridged, quiet, and stylised as in the 'Zeno' of the Vatican, where remains of the ancient nose point conclusions as to its shape. But a trait common to both heads is a prominent fold of the skin over the root of the nose.

It is just this individual stamp which, in combination with the marked rendering of temperament in the expression, gives its value to the *Holkham* head. It is not the calm likeness, suggestive of grave-stelae, which we have in the Plato type previously known, but the portrait of a living man, passionate, noble, full of spiritual emotion.¹⁶ The difference is too great to be considered the variation of a copy, nor does the head bear the impress of being a Hellenistic-baroque transmutation corresponding to the Socrates in *Villa Albani*.

In this portrait Plato is old. It is always dangerous to propose a precise date for a Greek portrait, but if we had to name a time in which age and expression would be suitable it would have to be immediately after that murder of Dion in Syracuse 353 B.C. which gave Plato such distress and was contemporaneous with the perfidious attacks on his philosophy which in the famous seventh letter he answers in righteous indignation.

By reason of the very large number of replicas it has been proposed, as we hear, to connect the Vatican type of Plato with the tradition of a statue in the Academy, set up by the Persian Mithridates and executed by Silanion, the best known of the portrait sculptors of the fourth century. An inscription found at Miletus has recently confirmed Pliny's dating of Silanion's activity in the last half of the fourth century B.C.¹⁷ Plato's portrait must therefore have been executed in the last years of his life or after his death.

Against this assumption, which however is shared by Bernoulli, Lippold is right in emphasizing the point that the portrait in question with its sobriety of treatment agrees but poorly with the sole traditional witness to Silanion's art, the characterisation of his portrait of the 'mad' painter

¹⁶ There seems to me to be a little attempt at realising passion in the Plato head of the Capitoline Museum: Stuart Jones, *Museo*

Capitolino, Pl. LVI, n. 58 (p. 242).

¹⁷ Last and comprehensively in Wilamowitz, *Platon*, II, 4.

Apollodorus: 'non hominem ex ore fecit sed inmundum'.¹⁸ It was thus a pathetic or, to use a more adequate expression, a pathognomic portrait. There must have been a similar pathos in Silanion's other famous work 'Jocasta,' the paleness of whose face was rendered by a mixture of silver with the bronze.¹⁹ On the other hand, the Holkham portrait would well suit Silanion's pathetic style. It has a 'terribilitas' especially when viewed in profile, which reminds one of the well-known 'Hippocrates' portrait of the Villa Albani,²⁰ in which Laeschke proposed to see Silanion's portrait of Apollodorus.

Besides Silanion's statue in the Academy, paid for by a barbarian, just as later the Pergamene king Attalus II and the Persian Ariarathes jointly erected a statue of the philosopher Carneades in Athens,²¹ there were in Athens, according to Olymiodorus, statues of Plato *παραγὰν ἀραξίμεναι*, and an epigram tells that Aristotle dedicated to Plato an altar in Athens, perhaps in front of one of these statues.²²

It is probable therefore that the grave of the philosopher, which was near the Academy, in addition to the swan, which is described as its decoration, was provided with a statue of him.²³ I should be inclined to connect the best known portrait of Plato with the grave-statue, both by reason of its character and on account of the numerous replicas. One may be surprised that there are so many reproductions of this uninteresting head and at present none of the Holkham type. Here we must remember that in the case of Socrates there is a similar state of things. While the most valuable portrait, artistically speaking, that in the Villa Albani, is practically only preserved in this one example, the least interesting Paris type is far more common than the Vatican or Naples type, which is Socratic in quite another manner.²⁴

The copying of the portraits of Greek philosophers to be set up on the *platai* of libraries seems to have been a regular industry, and even less well-to-do people, like the philosopher Nigrinus described by Lucian, were surrounded by numerous busts of philosophers.²⁵ It was evidently not artistic but other reasons which determined what originals should be preferred for copying. To understand this it is sufficient to read the beginning of Cicero's *De Finibus*, with its description of the intellectual Roman pilgrim reverentially visiting the grave of Pericles and the garden of Plato. It was this sentimentality which was exploited by the wily Athenian stonemasons;

¹⁸ Lippold, *Griech. Porträtskulpturen*, 56. Pliny, 34, 81.

¹⁹ Overbeck, *Schriftquellen*, 1355. Brunn, *Geschichte der griech. Kunst*, i. 386 ff.

²⁰ Arndt-Bruckmann, 975-6. Betrouffl, *op. cit.* i. 171, fig. 33. Hekler, *Greek and Roman Portraits*, 96 b.

²¹ Nuchmannson, *Historische Attische Inschriften*, 58, n. 60. Dittenberger, *Syllage*, 2066.

²² *op. cit.* S. Reinach in *Ann. Jour. Arch.* iv

1888, p. 4. Wilamowitz, *Aristoteles und Athen*, ii. p. 415.

²³ Pausanias, i. 30, 3. *op. Collignon, Statues funéraires*, 242. How universal a practice it was to decorate a grave with a portrait-statue appears, apart from actual finds, from Pausanias, iii. 24, 7 and 26, 7.

²⁴ Kekulé, *Bildnisse des Sokrates*, *Abh. der Berl. Akad.* 1908.

²⁵ Lucian, *Nigrinus*, 2.

and they had their good reasons for preferring to copy the simple portrait at Plato's grave rather than undertake the passionate work of Silanion. Both types were equally good for the opulent Roman tourists, who only wanted to have at home visible reminders of their 'grand tour' to Athens, and to whose passion we owe our collections of portraits of the great men of Greek intellectual life.

FREDEBIR FOULSEN.

PISIDIAN WOLF-PRIESTS, PHRYGIAN GOAT-PRIESTS, AND THE OLD-IONIAN TRIBES

On a Pisidian tombstone the name Gagdabos Edagdabos occurs. In publishing this in the *Revue des Universités du Midi*, 1895, p. 300, I quoted Radet's tempting conjecture, that it is a case of filiation expressed by prefix. Religion however furnishes a more probable explanation. A priest named Gagdabos adds his title Edagdabos. Gagdabos is a reduplicated form such as is extremely common in Anatolian nomenclature: e.g. on a sarcophagus found in the north Isaurian hills not very far from Lystra the two names Gaa and Gaggoa both occur and are evidently names in the same family, one a reduplication of the other; Kretschmer has noted (like all Anatolian students) the habit of using reduplicated names.

Gagdabos therefore, implies a simpler name Gdabos or Gdawos; this word was grecized as *δαός*, and latinized as *Davus*, a common name of slaves from Anatolia. *Δαός* is explained by Hesychius as meaning wolf; and the Phrygo-Pisidian god Manes was Daos, the Wolf (see *J.R.S.* 1918 p. 145). It was common to call slaves by the name of some god or king of their native land. Now in Anatolian and old Greek religion the priest bears the name and garb and character of his god. In a fertile sea-plain at Pergamos the order of priests called Boukoloi implies a religious cult for breeding and tending the ox and the cow, agricultural or pastoral (differing from the religion of the dry central plateau, where the goat and sheep can be more profitably bred). The head of this order was the Archiboukolos, and the original priest was Dionysos himself. On this analogy, and on Galloi-Archigallos, we look for a chief of the Wolf priests.

Radet *loc. cit.* quotes the group Logbasis, Idalogbasis, where Idalogbasis is described as an eponymous ancestor of the tribe Logbaseis of Termessos (see Lanck. II. p. 28), with the obvious meaning 'the chief of the tribe' (taken as a religious group).

The hypothesis is inevitable that there was in Pisidia an order of priests called Wolves. Then it is evident that, just as there was an Archiboukolos and an Archigallos, so there must have been a chief Wolf, Ede-gdabos, implying that archi- in Greek corresponded to the Anatolian *Ida* or *Ido* or *Ede*.

Mt. Ida was the chief or supreme mountain top: Sultan-Dagh in Parosiaios).¹ Idaguges was the chief Guges, probably some hieratic title in Lydia. Idomeneus, like Ida, has the first syllable long; but this is evidently due to poetic convenience (like *ἀδαναρως* in hexameters): the element *meno* or *mene* is common in names in the Anatolian priestly families (see *J.H.S.* 1918, p. 169). The Lycian city Idebesos may be another example.²

The term Archigallós was used by the Romans in the borrowed Phrygian cult of Cybele (from Pessinous), and Strabo mentions (like other authorities) that the Phrygian priests were called Galloi; but no epigraphical proof has been found that this name was used in northern Phrygia. In southern Phrygia towards Pisidia the name Archigallos is found on both sides of Sultan-Dagh, near Antioch and among the Oronteis. The name Gallos is probably old Anatolian, and it may possibly be the same as the personal name Glous found in the list of priests at Korykos. The Lycæonian and Isaurian name Lar or Lour (in the reduplicated form Lileus)³ may be connected. That Gallos and Glabos should become personal names is in accordance with custom.

For the moment I can only state the opinion based on Strabo that the Ionian tribe in old Attica, Aigikoreis, are goat-priests, who appear on ceremonial occasions as goat-men and are under the presidency of the chief goat-priest, viz. Attis himself, the god who teaches to mankind the religion of the goddess. The second half of the name Koreis, Anatolian Kaweis, exemplifies perhaps one of the many ways in which the Greeks attempted to represent the Anatolian sound W, for which they had no symbol, and which they were evidently unable to pronounce correctly. There came into play, of course, the general popular tendency to give some sort of suggestion of a meaning to a word belonging to an unknown language; but the use of *καβειρ* in the sense of priestess at Sardis, *καίης* (also *καίης*: Hes.) as priest of the Kabeiroi, and the employment of the word by Hippocrax all show that a word which had some form approximating to Kawa or Kowa was widely spread on the west coast and islands of Anatolia.⁴

The same hieratic term can be traced in a more purely Asiatic form in Phrygia. The priests of Kybele at Pessinous are called in inscriptions Attaboknoi. This word falls into two elements which generally have been wrongly specified. The first is not Atta (as has been stated)⁵ but Attabo,

¹ There are two objections to the interpretation of Mount Ida as the 'chief' or 'king' mountain: (1) The first syllable is long invariably, but Greek poetic usage does not furnish sufficient proof of the original Anatolian form and sound. (2) The statement is quoted from E. M. that Ida means a wooded mountain or *sidus*, but the authority is insufficient. It is more likely to be a mere scholastic inference from such phrases as *de cultibus idae* (as Fraser suggests).

² In *J.E.S.* 1917, p. 204 note, I erroneously quoted the name as Idebesos, and suggested

an etymology accordingly.

³ Perhaps Lar may be a broken-down reduplication. The G at the beginning would be a Greek attempt to represent the Anatolian W. The town of Lyria is perhaps connected. On Lar-Lour see Miss Ramsey's note in *J.H.S.*, 1904, p. 285.

⁴ See Buckler and Robinson in *A.J.A.* xvii, 1912, p. 362 ff. Fournier, *Rev. d'Et. Anc.* 1914, p. 438, suggests Old Persian *kāyāh*.

⁵ Buknoi was compared with Bouknoi. On these priests see *I.G. II. III.* 220, 223.

and the second is Kawot. Attabo is one way of rendering in Greek at a particular locality and time the Phrygian word mentioned elsewhere as Attego or Attago which meant goat. Ultimately the word was Attawo, and it is obviously closely related to the name of the god Attes: in fact Attes is the goat-god, i.e. the god of a people whose occupation was largely connected with the domestication of the goat.

Here again we have the goat-priests. Many lines of inquiry suggest themselves, from which I refrain here. It should, however, be pointed out that the central regions of Anatolia are mainly pastoral, and that agriculture plays little part, except in the occasional cultivation of gardens surrounded by walls: these were in fact sometimes called by the Persian name *Paradeisos*, walled enclosure, but generally by the Anatolian name *Kapo*.

The suggestion that B and R and L and W interchange in this way will strike horror into the mind of the philologist: but it must be remembered that this is not a case of the development of one single language. It is a case of the adoption in alien countries and languages of words from a strange tongue containing a number of sounds which were unknown to, and unpronounceable by, and unrepresented in the alphabet of, any of the Greek tribes and races. At different times and in different localities the same Anatolian sound was reproduced in different ways in Greek letters, in fact it is even true to assert that in the same place and much about the same time an Anatolian name was represented by different Greek letters. We are dealing here with a matter of history rather than of philology. Just as priest and presbyter are the same Greek word which has come into English through different routes and assumed totally different forms, and just as the Germans call that Polish river Weichsel which we call Vistula, and the Germans and we call Dantzig (or slightly different spellings) the Polish town Gdansk, and just as the Croatian town of Zagreb is called in German Agram, so it is with the rendering of Anatolian names in Greek. The total difference in the character of enunciation in Anatolia and in Greece is a fact which is as true at the present day as it was in ancient times. The quotation made in *H.G.A.M.*, footnote to p. 281, can be applied universally with reference to the difference between Greek and Anatolian pronunciation. Sounds which existed on the eastern side of the Aegean were unknown on the western side. Not merely is this the case with the spirants W and Y: it is equally the case with the nasalised vowels which are such a marked feature of Lycian and Lydian alphabets and which give rise to so many variations in the grecisation of Anatolian proper names; and, also, vowels which were long in Greek were shortened in Anatolian pronunciation and *vice-versa*. The halting versus inscribed on tombs often show this non-Greek quantity.

It is natural that in a wild mountain region like Pisidia the god and his priests should be conceived by the people in a savage aspect;⁴ whereas in

⁴ On the monument dedicated to the deceased Augustus at Pisidian Antioch (see *J.E.S.*, 1916, p. 195) the bearded captive *Homoclesianus* or Pisidian Wolf-man was

represented in his ideal ugliness as the naked savage. He is the man in his brutality, though retaining the human form.

the peaceful level plains of Phrygia, devoted largely to pastoral pursuits and especially to the breeding of the goat; the god and his priests should be pictured as the teachers and regulators of goat culture; while at Pergamos in a low rich valley, where cows were more important than goats, the god and his priests are described as cow-keepers (*Βουκόλοι*).

Now, as to the old Ionian tribes, or occupations, they may be taken as coming from the East Aegean shores (where the names are found sporadically).¹ We assume, though it may appear dogmatic to do so, that everyone who reads the evidence of Plato (*Critias* 24 and *Timaeus* 110) and of Strabo p. 383, will come to the same conclusion, viz. that there was an old system of classifying the people of the Aegean lands, i.e. the Old-Ionians, the 'sons of Yavan,' into four classes—warriors, priests, artisans and agriculturists—and this four-fold division was an ancient Asiatic custom.² Unfortunately these excellent authorities do not give the ancient names for the four classes; and they differ in the order of enumeration. The order which they employ is probably dictated by the general purpose in their minds at the time of writing, and is not the ancient traditional arrangement. Plato enumerates *ἱερεῖς*, *δημιουργοί*, *γεωργοί*, *μάχιμοι*; Strabo mentions *γεωργοί*, *δημιουργοί*, *ἱεροποιοί*,³ *φύλακες*; but his list may be in inverse order. Either priests or warriors must have been first in dignity: a warrior state with a conquering caste would put warriors first.

Euripides, *Ion* 1570 f. Herodotus, v. 66, Plutarch, *Sol.* 23, Pollux, viii. 169, Stephanus enumerate the names. They differ in respect of the order, and to some degree in respect even of accentuation and form. Euripides has *Γελέων* (*Τελέων* is false), *Ὀπλητες*, *Ἀργαῖδες*, and *Αἰγικореῖς*. As eponymous heroes of the tribes Herodotus gives *Γελέων*, *Αἰγικореῖς*, *Ἀργαῖδες*, *Ὀπλης* (sons of Ion). Stephanus has *Αἰγικορεῖς* (calling it an error for *Αἰγικορεῖς*), *Ἀργαῖδες*, *Γελέοντες*, *Ὀπλίται*. Plutarch mentions *Ὀπλίται*, *Ἐργαῖδες* (artisans), *Γεῖοντες* (agriculturists), *Αἰγικορεῖς* (herds). He is misled by the name *Aigikoreis*, which he understands as herds;⁴ and recent historians of Greece, especially the Germans, prefer the authority of Plutarch to that of Strabo, while they rarely regard Plato as being even an authority. As above stated we regard confidently *Aigikoreis* as the priestly class, practising certain rites in a special dress, of which the goat-skin was the prominent feature.

The difficulty as to the reading *Geleon* or *Gedeon* is embarrassing, but the cult of Zeus *Geleon* points to this as the true form. We reject the supposition that original D had changed to L, for the religious fact is the safest guide. At one time I thought of *Gedeontes* as *Gadavantes* (connected

¹ See Parry-Wisniewa, *o.c.* *Aigikoreis*.

² It is assumed that Plato was not inventing realities, but was guided by wise old ideas; the *Critias* states Cretan facts, not mere fancies, though under a veil of fancy.

³ Strabo repeats the word *ἱερεῖς*; this has a purpose, natural to one who knew the Anatolian facts and religious Associations.

⁴ Plato, *Tim.* 110, classes shepherds, hunters, agriculturists together. According to the social order the same set of men would be shepherds in a nomadic pastoral tribe and agriculturists in an agricultural society. Plato's purpose and natural character might lead him to put warriors last, and to use the rather derogatory term *αἰγίαι*.

with Gda or Gdan, earth in Phrygian or Anatolian), but I could not work this out in a complete theory.

It has been commonly assumed that the Hopletes must be identified with the classical Greek Hoplitai,¹¹ but this inference is not necessary. Hoples, the son of Ion, and the class which takes its name from him belong to a far earlier stage in language and custom; and we must not assume that ὅπλον meant a warlike weapon in primitive Aegean usage. It is quite possible that this word meant implement, and that Hopletes were the artisans; such a conjecture is as justifiable as the very uncertain ancient belief. The personal name Hoplôn is common in Pisidia, and accordingly there can be little doubt that ὅπλον is Old-Anatolian and has to be judged on this footing. It seems of course more probable that in Pisidia Hoplôn meant warrior than artisan. The name is used in noble families, who would be unlikely to employ a name that meant artisan; but it is a reasonable supposition that Hoplôn there meant a man who made warlike weapons (an aristocratic occupation), while among the sons of Yavan, who from the beginning stood on a higher plane of civilisation, Hopletes were artisans in the generic sense.

The genealogical theory naturally came into play that these four classes took their names from the four sons of Ion or Yavan. With regard to the number all authorities are agreed, except Pollux, who probably by error in transmission of the text substitutes the single Kadois for the two names Argadeis and Gedeontes. Perhaps he found this latter form, and not Geleontes, in his authority; but he cannot be quoted in support of either form. Strabo and Pollux are agreed that there were more stages than one, and even Plutarch dimly shadows forth that there were at an earlier time tribes, and that these tribes chose different occupations (*βίαι*). The truth lies behind all this that a certain development occurred. Pollux mentions four stages, stating, in the first two, mythological names of the tribes. As a third stage, Pollux gives the four Athenian tribes in the time of Erichthonios according to the names of the deities with whom each was connected, Dias, Athenaia, Poseidonias, and Hephaistias. In all probability these lists are connected: the third states the tribes as four religious groups protected by four special deities, the last uses tribal names. Euripides connects the Aigikoreis with Athena and her Aegis. The cult of Zeus Geleon at Athens implies that the tribe Geleontes was associated with Zeus. There is no ancient authority for connecting the other two tribes with two special deities, but it may be assumed that the craftsmen or artisans had Hephaistos as their protecting divinity. There remains Poseidon as the god of the peasant class.

¹¹ Plutarch, Stephanus, and Pollux (who use the form Hoplitai) considered them the Warriors, arising in regard to the meaning of an old Indian and Anatolian name through identifying it with a later Greek word. Similarly Plutarch (on his authority), who

substituted Ergadeis for Argadeis, was influenced by the belief that this class was the Artisans (connected with ἔργον); but in Anatolia the initial digamma would not have been lost.

That their protecting deity is Poseidon may seem strange; but we know little about the original character of the Old Ionian Poseidon. He was perhaps the guardian and guiding divinity, who subdues the earth for the use of men and directs them in their work (like Herakles).¹² Hence at Athens Poseidon-Erechtheus was a natural and official identification.

In *J.H.S.*, 1918, p. 183, three of the four tribes at Iconium are described: (1) Augusta the tribe of Zeus, the supreme god Augustus, identified with Zeus; (2) the tribe of Athena (Polias?); (3) the tribe of Herakles, the toiling god, who makes the earth serviceable to men; (4) is still unknown.

Certainty is not yet attainable; but a definite conjecture may stimulate criticism. We follow the order of Herodotus¹³—

(1) Geleontes (Dias) are the class of warriors, including the king of a conquering tribe: Gelan in Carian meant king; Gelanor was an old king of Argos; Zeus Geleon is the tribal god, i.e. Zeus Basileus.

(2) Aigikoreis (Athenais) are the priests, wearing Athena's *aigis* (as Euripides mentions).

(3) Argadeis (Poseidonias) are the agriculturists; the name is connected with *áγρος*, field, and survives in the Turco-Anatolian village, Manarga (the field of Man or Men), near Antioch, that 'Phrygian city on the Pisidian frontier.' Derivative names, like Argilos, Argissa, etc. are wide-spread in the Aegean and Anatolian lands.

(4) Hoplotes (Hephaistias) are the makers of *ὄπλα* of all kinds.

Fraser suggests that in Aigikoreis the second element may be connected with Korubantes. This reminds me that Luk(abas?) Sôzôn on coins of Themissionion, a Phrygian town in the Pisidian frontier hill-country, may be a shorter expression for the full hieratic title Manas Daas Hebodromos Zeus (*J.R.S.*, 1918, p. 145). In that case Luk(os) or Luk(abas) would correspond to Daos-Gdabos, the Wolf-god, while Sôzôn-Saoazos is the Sun-god, and Zeus the Greek title is added.

WILLIAM MITCHELL RAMSAY.

[The Greek system of accentuation does not suit Anatolian words (*J.R.S.*, 1917, p. 266). In writing these words with Greek letters it might be better to use no accents.—W. M. R.]

¹² On the 'Peasant God,' 'the great moral figure' in the early religion of Anatolia, see *Leto the Phrygian and Other Studies in Religious History*.

¹³ The regular order was according to Topffer in *Pauly-Wissowa*, quoting as his authority Meier, *de gentib. Att.* 4) Geleontes, Argadeis, Aigikoreis, Hoplotes.

THE APHRODITE FROM CYRENE

[PLATES IX, X.]

THE sculptures recently discovered by the Italian excavators at Cyrene were described and discussed by Signor Bagnani at a general meeting of the Hellenic Society on 9th November, 1920. It is hoped that Signor Bagnani's paper, together with full illustrations of all the sculptures referred to, will appear in the next number of this *Journal*. Meanwhile our readers will probably be glad to have a reproduction of the Aphrodite, which is the finest of them, but is not yet so well-known or so accessible as it should be on its merits.

Most of the statues found at Cyrene decorated a kind of hall, which served as a gallery of sculpture. They are by no means homogeneous, though most of them clearly belong to the Hellenistic age. There is, therefore, little external evidence to guide us to the period or school to which any of them belongs; and we are left mainly to internal evidence, derived from a study of the statue itself.

The type is a familiar one, that of Aphrodite arising from the sea (Anadyomene), and the action of her arms must be restored as squeezing the moisture from her hair; a point projecting on the front of the left arm shows where a tress was probably attached. The classical example of this type, celebrated by numerous epigrams, was the famous picture by Apelles, set up in the Asclepeion at Cos, and subsequently transferred to Rome by Nero. No example of the type in sculpture is known to me earlier than this; but it becomes very common in later Greek art, especially in statuettes both of marble and of bronze. It offers the same opportunities for the display of a beautiful figure that are supplied by another favourite type, the young athlete placing a fillet round his head (Diadumene) or the maiden binding up her hair. The chief difference is that in the Anadyomene type the arms are not raised so high, as the hands do not touch the head but hold out the tresses of hair about level with the shoulders. An example of the type is here reproduced from a little statuette bought in Alexandria (Fig. 1). The two sides of the figure are reversed, but the action is similar; and it is even

possible to see the position of the lock of hair which has left its trace in the point on the left arm of the Aphrodite from Cyrene.

The Anadyomene type offers the greatest possible contrast in position and motive to the Cnidian and its many derivatives. The self-conscious



FIG. 1.—BLOUIN
STATUETTE FROM
ALEXANDRIA

shrinking from observation, shown not only in the position of the arms but in the whole poise of the body, is here entirely absent. The Cyrene Aphrodite stands straight up—the outline of the figure on her left side even exaggeratedly straight. The motive of the bath gives a human touch to the Cnidia, who drops her garment over a large vase. In the Cyrene figure the support at the side, in the form of a dolphin, is clearly an allusion to the rising of the goddess from the sea. This dolphin is sometimes transferred to a variation of the Cnidian type like the Venus dei Medici. The presence of the dolphin, in an unnatural position, may well be transferred from the picture by Apelles, where it would be in place in the sea that appears to have partly covered the goddess. Its presence suffices to indicate a Hellenistic date, and the shawl-like garment with a fringe placed over it seems to be borrowed from the Cnidian type; a precisely similar garment appears in the Capitoline Aphrodite, to which Dickens¹ assigns, with good reason, an Alexandrian origin, the fringed

cloak being characteristic of Isis.

Any final decision as to the school and period of the Cyrene statue must, however, depend on considerations of style. The extraordinary beauty of the figure has been generally recognised, but it also shows a remarkable degree of individuality. The wonderful softness of surface modelling recalls the tradition of the Sons of Praxiteles, as recorded both at Pergamon and in Alexandria. But the forms of the body are strong and massive, unlike those of such a variant as the Aphrodite with Triton.² The shoulders and breast are very broad and firm; the lower ribs, just above the waist, on the other hand, are somewhat slight and weak in contrast. This may well be the result, in a model, of the Hellenistic fashion of wearing a very high and tight girdle. But the lower part of the body and legs are abnormally plump. It is this combination of inconsistent parts that gives its peculiar character to the statue as a whole. It is difficult to find any exact parallel. The well-known 'Esquiline Venus' is indeed similar in the great plumpness of the lower part of the body and legs in contrast to a much slimmer waist and chest; but that statue has in its upper part an archaic character far removed from the style of the Cyrene statue. It is greatly to be hoped that the head of this statue may be found in further excavations. But perhaps, after so long an interval (the Aphrodite was discovered in December, 1913), this is

¹ *Hellenistic Sculpture*, p. 25.

² Dickens, *op. cit.* Fig. 25.

hardly probable. It would be rash indeed, among the puzzles and contradictions already noticed, to conjecture as to its probable type.

From the comparisons already made it seems clear that in the Cyrene statue, we have a masterpiece of early Hellenistic art. And the characteristics of style, as well as other indications, seem all to point to the school of Alexandria as its probable origin. Such an attribution has every probability in its favour on geographical grounds. How far it is confirmed by the other statues found in the Italian excavations must remain undecided for the present. Alexandrian art is as yet but little known to us, though the influence of Alexandria on Rome and the rest of the ancient world must have been very great in art as well as in literature. An original masterpiece from this source is therefore a great gain to our knowledge of the Hellenistic world.

ERNEST A. GARDNER.

CORNELIUS NEPOS ON MARATHON.

IN the discussion on the battle of Marathon which Mr. How and Mr. Casson have recently carried on in this *Journal*, both these scholars have assumed that the Athenians fortified their position by artificial means.¹

This opinion seems to be construed out of a passage in Cornelius Nepos, the text of which, to judge by Mr. Casson's quotations, is read by him as follows:—

Dein postero die sub montis radicibus acie regione instructa nova arte vi summa proelium commiserunt: namque arbores multis locis erant raræ; hoc consilio, ut et montium altitudine tegerentur et arborum tractu equitatus hostium impediretur, ne multitudine clauderentur.²

Now the words 'nova arte' certainly suggest an artificial fortification. But they only occur in a late MS. of inferior authority,³ and they undoubtedly are a false reading, for no proper sense can be made of the first sentence so long as they remain in it. 'Vi summa' is redundant, and 'regione' is left hanging in the air. Hence the most recent editors have rejected this reading and have adopted that of a more authoritative MS.: acie regione instructa non speritissima.⁴

The only other words of Nepos which might be taken to indicate a field-work are 'arborum tractu,' which might possibly be construed 'by the hauling of trees.' But, apart from the fact that a participial construction like 'arboribus tractis' would be required by correct Latin usage, this would be a highly elliptic way of conveying the fact that the trees had been felled and hauled into position. Therefore we can hardly avoid taking 'tractu' in the sense of 'tract' or 'expanse.' This meaning of the word is well attested, especially in connexion with landscapes.⁵ In the present instance, moreover, the meaning of a drawn out line or clump of trees is eminently suitable to

¹ Mr. How in *J.H.S.*, 1919, p. 50: 'In the actual description of Marathon the best points in Cornelius Nepos are . . . the means taken to strengthen the position artificially.'

Mr. Casson in *J.H.S.*, 1920, p. 44: 'The same art, by which something approximating to barbed wire supplied the Greek lack of cavalry.'

Ibid.: 'Troops retrenched traditionally employ obstacles. The men of Marathon

were none the less horses if they did so too.'

² *Mitridates*, ch. 5, § 3.

³ See the preface of Mr. Winstedt's edition.

⁴ So Dietrich and Winstedt.

⁵ Cf. Pliny, *Nat. Hist.* xvii, 35: genera vitium separari ac singulis tractibus conseri, utilissimum.

Hor. *Epist.* i, 15, l. 22: tractus uter plures lepores, uter eluces apros.

the context, for it aptly resumes the previous words 'arbores multis locis erant rursus'.

Thus it is difficult to resist the inference that the Athenian flank defences were a natural growth of living trees, and not a hand-made obstacle. A plantation still exists between the Soros and Mount Kotromi,³ which fits in well with Nepos' 'sub montis radicibus'. If Nepos' description of the battle is correct, this group of trees may be taken to mark the Athenian flank.

M. CARY.

³ See the sketch for Marathon in Curtius Reupert's *Karten von Attika*.

CLEOSTRATUS: A POSTSCRIPT.

SINCE writing my paper on Cleostratus,¹ I have received from Professor Boll a copy of his masterly treatise, *Antike Beobachtungen farbiger Sterne*,² in which³ he incidentally deals with the *πρῶτα σημεῖα* of Cleostratus, which he identifies with the sign Libra. This interpretation is based on an excerpt from Antiochus,⁴ dealing with the pernicious degrees of the zodiac. The passage runs as follows:—

Κέντρον Σκορπίου ἀπὸ ε' ἕως ι', κρίσεως Ἄρεως καὶ Κρόνου· καὶ <ή> πρώτη μοῖρα κρίσεως Ἑρμοῦ· κτλ.

Professor Boll recognises that the words ἀπὸ ... Κρόνου cannot refer to the Scorpion's sting, and supposes that after Σκορπίου the words τὸ μέτωπον τοῦ Σκορπίου have fallen out. He then takes ἡ πρώτη μοῖρα as equivalent to the *πρῶτα σημεῖα* of Cleostratus, a traditional phrase unlike the terminology of the rest of the passage. α and β Librae have, as he points out, the temperament of Jupiter and Mercury according to Ptolemy,⁵ and he therefore identifies the *πρῶτη μοῖρα* or *πρῶτα σημεῖα* of the temperament of Mercury with Libra.

My objections on other grounds to this identification are stated in pp. 171, 172 of my paper. It remains now to deal with the excerpt from Antiochus. The text of this excerpt may be restored with great accuracy by a comparison with the parallel passages in other texts. See the Anonymus of 379,⁶ Abu Masar,⁷ and more especially the *Excerpta Parisina*,⁸ the last of which exhibits a close verbal correspondence with Antiochus. In the *Excerpta Parisina* the passage runs:—

Κέντρον Σκορπίου Τοξότου μοῖρα α', κρίσεως Ἀφροδίτης καὶ Ἄρεως. Μέτωπον Σκορπίου ἀπὸ μοῖρας θ' ἕως μοῖρας ι', κρίσεως Ἄρεως καὶ Κρόνου. κτλ.

There can be little doubt that the passage in Antiochus must have run:—

Κέντρον Σκορπίου Τοξότου πρώτη μοῖρα, κρίσεως Ἑρμοῦ· μέτωπον Σκορπίου ἀπὸ ε' ἕως ι', κρίσεως Ἄρεως καὶ Κρόνου· κτλ.

¹ *J.H.S.* xxxix. 1919, pp. 164-84.

² *Abhandlungen der königlich bayerischen Akademie der Wissenschaften, philo.-philol. und hist. Klasse*, xxx. 1918, Abh. 3.

³ Pp. 70, 71.

⁴ *Catalogus codicum astrologorum Graecorum*.

rom, vii. 1908, pp. 111, 112.

⁵ *Parabiblos*, I. 9.

⁶ *Cat. cod. ms. Graec.*, i. 1, 1904, p. 208.

⁷ *Ibid.* p. 170.

⁸ *Ibid.* p. 226.

The words Ταξότου . . . Σκorpion must have fallen out and have been imperfectly restored in the wrong place. Thus restored the passage yields excellent sense. The πρώτη μοῖρα becomes the first degree of Sagittarius, and is perfectly consistent with the terminology of the passage. The Scorpion's sting, according to Ptolemy, consists of the two stars which we call λ and ν Scorpii. The longitudes of these two stars in 300 A.D. were $240^{\circ}9$ and $240^{\circ}4$ respectively, and they therefore stood where the Excerpta Parisina place them, in the first degree of Sagittarius. Moreover, they are given the temperament of Mercury and Mars in Ptolemy's *Tetrabiblos*,* which agrees well enough with the temperament of Mercury mentioned in this passage. There is no reason whatever to connect the simple phrase πρώτη μοῖρα in Antiochus with the πρώτα σημεῖα of Cleostratus.

Professor Boll has shown¹⁰ that Antiochus is older than Porphyry, who names him in the *Isagoge* to the *Tetrabiblos*. If the longitudes in this excerpt have not been altered by a later hand, he cannot have been much older. The horoscopes published by Grenfell and Hunt¹¹ show that in the latter part of the third century the astrologers had not merely corrected Ptolemy's false equinox, but were inclined to adopt for the Sun at least longitudes in excess of the truth. There would seem therefore to be no difficulty in supposing that the longitude in the passage before us represents the genuine text of Antiochus.

I take this opportunity of correcting two clerical errors in my paper on Cleostratus. On p. 177, l. 15, 'years' should be 'months,' and on p. 178, l. 30, 'fourth' should be 'third.'

On pp. 171-3 of that paper I have explained πρώτα σημεῖα as the first stars of Scorpio to set cosmically, but have omitted to name these stars. At Tenedos in the time of Cleostratus η and γ Scorpii would answer this definition and are presumably his πρώτα σημεῖα.

J. K. FOTHERINGHAM.

* l. 9.

¹⁰ *Spharra*, 1903, pp. 54, 55.

¹¹ *Gryphus Papyri*, xii, 1916, pp. 221.

232. On p. 234 of that work by an ignorant

blunder I gave a false and complicated meaning to the word *apocrypha*. Its real meaning is simply 'retrograde.'

NOTICES OF BOOKS

A Grammar of the Greek New Testament in the Light of Historical Research. By A. T. ROBINSON, M.A., D.D., LL.D., Litt.D., Professor of Interpretation of the New Testament in the Southern Baptist Theological Seminary, Louisville, Ky. Third ('definitive') edition. Pp. lxxvi + 1454. Hodder and Stoughton. New York: George H. Doran Company, 1919. 42s. net.

The advance of comparative philology and large additions to our stock of illustrative material have revolutionised ideas about the language of the New Testament and thrown many older works into the shade. Grammars of N.T. Greek have been plentiful of late, but misfortune or chance has prevented some of the ablest workers from bringing their task to completion. Friedrich Blass, indeed, produced a complete and handy Grammar in 1896, which, revised by DeLamarter, reached its fourth edition in 1913. But Blass, profound as was his knowledge of Attic Greek, was not on familiar ground in the N.T., and did not perhaps take sufficient account of the latest lights afforded by the papyri. The sentence in which Schmiedel's revision of Winer broke off, over twenty years ago, still remains unfinished. Prof. J. H. Moulton, whose brilliant *Prolegomena* appeared in 1906 (3rd ed., 1908), to the grief of all who knew him and with irremediable loss to scholarship, met his end at sea as a victim of the war. It has thus been reserved for an American professor to produce the fullest and most comprehensive treatise in the light of all the available evidence.

Blass's work was comprised within 350 pages and was written for those who regarded the *πρὸς Βεζαίον* as a *πρὸς ξανόν*. The stout American quarto before us is more than four times that bulk and, we must add, suffers from its massive proportions. It would be ungracious not to acknowledge Dr. Robertson's extraordinary diligence in a work which has occupied eleven years, his wealth of learning, his interesting historical Introduction, his recognition that Greek is a living organism and that the N.T. language must be studied as part of the larger whole, his sketches of developments ranging from Sanskrit down to modern Greek, his sane views with regard to many so-called "irregularities," with his insistence on the allowance to be made for the personal equation in the writer's style (p. 336) and on the error of judging Greek idiom by English or German practice (700). On the other hand, the book has some serious defects. It might with advantage have been drastically curtailed. Needless repetitions occur throughout, sometimes on the same page. A mere table of contents occupying over forty pages ceases to serve the reader's purpose. Sub-division is carried to excess, and usages are illustrated which are absent from the N.T. In places one cannot see the wood for the trees, and the root-meaning, *s.p.*, of the *τὸν* is lost in the mass of examples. The citation of authorities is excessive; the work sometimes degenerates into mere compilation of opinions gleaned from all sources, with consequent loss of clarity and connexion. The most elementary points are elaborated, while passages of real difficulty receive inadequate treatment. We miss the terseness of Blass (whose weighty authority should not be lightly disregarded), the pungency and fascination of J. H. Moulton. We can but note a few details. How does Thucydides merit the charge of 'vainglory' (p. 121)? Few would now agree that 2 Peter is the work of the Apostle (125). A list of compounds of *αἶς* occupying nearly a page (529 f.) serves no useful purpose and is typical of others. The discredited rendering

of *wp̄* ̄ ̄ *wp̄* (Mt. xvi. 50) as a *quoniam* is retained without hint of any alternative (1956). The statement that 'in general when *wp̄* is anarthrous in Paul it refers to the Mosaic Law' (799) needs qualification; see Sanday-Headlam on Rom. 7. 12. What is the meaning and relevance of the sentence, 'This (Impersonal Construction) is the usual idiom in the Coptic in lieu of the absence of the *passive*' (820)? The author blunders in treating Mt. vi. 5 as a conditional sentence (1933, etc.). It was surely needless to state that *wp̄* *wp̄* *wp̄* does not mean 'without preaching' but 'without a preacher' (1190), or that *wp̄* with infinitive is unconnected with English 'to' (1065).

The printing in general is remarkably accurate, considering the immense size of the work. We have noted some errors in names, p. 12 (Hainer), 26 (Ralls), 50 (De Canges), 212 (Lionetti), 1011 (Debesman) and a few others.

While Dr. Robertson's work brings together for the first time much useful material, the *Ideal Grammar* has yet to be written. Moulton's *Prolegomena*, incomplete as it is, still retains its pre-eminent position.

The *Oxyrhynchus Papyri*. Part XIII. Edited with translations and notes by
BERNARD P. GRIBBS and ARTHUR S. HUNT. Pp. 235. 6 Plates. London:
Egypt Exploration Fund, 1919. 25s.

The Egypt Exploration Society (to give it its new name) continues with astonishing regularity to produce its annual Græco-Roman volume from the abundant treasures of Oxyrhynchus, and not one of these volumes fails to offer something of interest and value. The present one, which, like v. and xi, consists wholly of literary or theological texts, might be expected to show some falling off from the standard of its predecessors as the stock of literary papyri becomes exhausted; but this is certainly not the case. It contains, indeed, no papyri of such importance as those which rendered to us the *Panais of Pindar*, the *Hellenica Oxyrhynchica*, or the *Ichniæus* of Sophocles, but many of the texts here published are of considerable value, and numerous points of great interest are raised.

The 'Theological' section is less noteworthy than in some of the preceding volumes. The first text, indeed, 1894, is of interest as containing an unknown recension of Tobit, which throws new light on the relations of B.A. and N.; but Tobit is not a wildly exciting work. More interesting is a tiny scrap of Acts xxvii, in which the editors find traces of a 'Western' type of text. There is nothing specially surprising in this, but the fact, if fact it be, is certainly deserving of attention. Some diacrits, however, arise. The scrap is so small that most of the peculiar readings are restored, at least partially. The most obvious is that in ll. 1-3, where the editors read *or carjia carja san apyos karjia or j* *carja* (ordinary text is *carjia carja carjia carjia carjia*, Cod. Gigas, *carjia carjia carjia carjia carjia* in *ap*). *Carja* certainly suggests the 'Western' text, but it is worth pointing out that the confusion of *carjia* and *carjia* is by no means uncommon in the more literate writers, and it is not wholly impossible that *carja* really stands for *carjia*, in which case the 'Western' reading vanishes. It is perhaps a little unlikely that *carjia* for *carjia* should occur in a text of this character, but the fragment is really too small to determine the degree of the scribe's literacy, and it will be as well not to rely too implicitly on this papyrus as evidence for the existence of a 'Western' text in Egypt.

Another fragment of the *Shepherd of Hermas* is a welcome addition to the MS. material for that work. There are some unidentified theological fragments, one of which, 1993, a violent attack on the fair sex, has been identified, independently, by both Signora Castiglioni (*Rend. R. Ist. Lomb. di Sc. e Lett.* 52, 1910, pp. 202-6) and Dr. Rendel Harris (*Ann. of the John Rylands Library*, 5, 1910, pp. 336-7) as part of Pseudo-Chrysostom. In *Doct. & Lit. Rev.* It is interesting, and perhaps of importance for the question of authenticity, to find this supposedly spurious work circulating in Egypt (whether under Chrysostom's name we cannot tell) in the fifth or sixth century.

Among the 'New Classical Fragments,' which form, as usual, the cream of the volume, the first place is undoubtedly taken by 1604, containing dithyrambs of Pindar. The fragments are not extensive, but one contains fifteen lines (nearly complete or admitting of certain restoration) from the beginning of the dithyramb for the Theban; of which the first three lines were extant as Fr. 79 a. This passage, with its description of the dithyramb in Olympia, is a superb example of Pindar's genius and a really valuable addition to our stock of Greek poetry. The scrap of Menander's *Mussipennis* which follows it is too small to be of much importance; but 1606, which comes next, yields considerable fragments of several new speeches of Lysias; and though these are not of very great moment, the first at all events, *epi thesthaias*, dealing with the ownership of property seized by the Thirty Tyrants and apparently sold by them to Hippothemes, is of some value for the history of the period. The next papyrus contains portions of a speech on behalf of Lycophron which the editors doubtfully assign to Hyperides, though it is not part of the speech for Lycophron in the British Museum papyrus and the latter is not described as *α* or *β*. As they point out, there is nothing improbable in the supposition that Hyperides wrote two speeches in this case. More interesting than this is 1608, fragments of the *Alcibiades* of Aeschines Socraticus, noteworthy as giving us a glimpse of Socrates through other eyes than those of Plato or Xenophon, though it must be added that not very much remains. Not appreciably larger are the fragments numbered 1610, but they are of greater value for their bearing on several matters of historical importance. In an elaborate introduction, a good example of the combined thoroughness and acuteness which distinguishes all their work, the editors make it overwhelmingly probable that these fragments are from the *Histories* of Ephorus; and from this conclusion important corollaries follow. The relation between 1610 and Diodorus proves that the latter followed Ephorus closely, indeed slavishly; and this fact, while it further diminishes such respect as historians may have had for Diodorus, increases the value of his work, which may now be taken as, in general, giving us the substance of the earlier writer's. In the second place, the new fragments have a bearing on the disputed question of the authorship both of the *Hellenica Oxyrhynchica* and of the fragment concerning the Orthagoridas at Sicily (P. Oxy. 1365). Its evidence does not settle anything (Lapsus, the chief champion of Cratippus, continues to maintain his authorship of the *Hellenica Oxyrhynchica* against it; *Brit. Phil. Week.*, Oct. 4, 1919); but it seems, on the whole, to strengthen the case for Ephorus.

The other new texts are of less interest, but they include a work on literary criticism with some new quotations and an oration on the cult of Caesar, which shows a striking boldness of tone.

Among the fragments of extant works mention may be made of 1614, the first papyrus which the sands of Egypt, comparatively rich in specimens of his lost works, have given us of Pindar's epinician odes. Comparatively late (fifth or sixth century), it is yet far earlier than the vellum codices, and is of some importance as showing that the text had not undergone any considerable change between the date of the papyrus and that of the vellum MSS. A small fragment of the *Ajax* of Sophocles (1615) gives the probably correct reading *Nano* for *Nien* in l. 699. The fragments of Theocritus, *Idylls* v., vii. and xv., in 1618, despite their bad state of preservation and late date (fifth century), are of distinct importance for the purposes of textual criticism, and the papyrus of Herodotus (1619) and Thucydides (1620-3) are also valuable. The text of Plato, *Protagoras*, in 1624 is of some interest; and that of Aeschines, *In Ctesiphontes*, offers several improvements on the text of the later MSS. and serves yet further to establish the superiority of the family known as A.

It is hardly necessary to add that the editorial work is, as usual, brilliant. To an unrivalled skill in decipherment Messrs. Grenfell and Hunt add a thoroughness of research, a range of knowledge, and a rapidity of production which make their volumes a justified cause of pride to British scholarship.

Juristische Papyri. Erklärung von Urkunden zur Einführung in die Juristische Papyruskunde. By PAUL M. MEYER. Pp. xx. + 380. Berlin: Weidmannsche Buchhandlung, 1920. M. 22.

Prof. P. M. Meyer's editions of papyrus texts are well known for the elaborate commentaries and wealth of references and parallels with which they are equipped; and the present collection of notable juristic texts will be heartily welcomed by papyrologists on that ground alone. It is often essential, alike for the decipherment and for the understanding of a document, to compare as many papyri of the same class as possible, and if a text of any particular class has been edited by Prof. Meyer the knowledge that it is sure to be accompanied by a very comprehensive bibliography will save the student a great deal of research. But Prof. Meyer has not merely an exceptionally rich fund of bibliographical knowledge; he is also a good decipherer and endowed with great acuteness and ingenuity in the interpretation of texts; and his explanations, if, in common with other people's they sometimes fail to maintain themselves in the light of simpler knowledge, are always deserving of consideration.

It is natural to compare the new volume with the standard work of Mitteis, the *Juristischer Teil* of his and Wilcken's *Grundzüge und Chrestomathie der Papyrskunde*. Though it inevitably covers a good deal of the same ground as Mitteis, it is planned on somewhat different lines, and since many important texts and monographs on legal questions have been published since the appearance of the earlier work, it has been possible to add very considerably to the material there collected. The special object of Meyer's volume is, as he explains in the preface, to serve as an introduction, alike for jurists unacquainted with papyri and for historians and philologists, to the legal side of papyrology; and it can truly be said that it will admirably answer that purpose. Clearly, if succinctly, expressed, and well arranged, it compresses a vast amount of information into a comparatively small space, and its wealth of bibliographical reference enables the student to follow up any subject which he desires to study more minutely.

This single volume may in some sort be described as a combination of the two parts into which Mitteis's work was divided. In his *Grundzüge* Mitteis gave a compendium of the whole field of Græco-Roman law as illustrated by the Egyptian papyri, while in the *Chrestomathie* were collected the illustrative texts with the essential minimum of commentary. In Meyer's book, on the contrary, the illustrative texts are, so to say, imbedded in the discussion of the problems dealt with. The work is divided into parts, as follows: *Personenrecht, Urkundenwesen, Obligationenrecht, Sachenrecht, Strafrecht, Prozessrecht*. These parts are again subdivided into sections, and for the most part the sections are preceded by a brief introduction on their subject matter; the discussion of details is reserved for the introductions and commentaries attached to the single texts. Characteristic and very commendable features of Meyer's work are his translations of the Greek technical terms into the terminology of Roman law, and the very clear and helpful classifications of the parts and clauses of the various documents quoted. In another respect his practice is less worthy of approval. It is obviously advisable, in a work of this kind, to print the texts continuously, not preserving the line-arrangement of the originals; but this makes it all the more necessary, for purposes of handy reference, to number the single lines as clearly as possible. Mitteis and Wilcken do this by printing the number of each line at the beginning; but Meyer, abandoning this excellent practice, gives the number only of every fifth line, in the margin, which is far less convenient.

It is hardly necessary to say that in a volume of this size the editor can give only a limited number of texts. Inevitably one wishes here and there for a wider range of illustrations; certain subjects are felt to be inadequately treated; and it is possible at times to question the selection of texts; but the same might be said of any similar collection on this scale, and probably Prof. Meyer shows as great impartiality and judgement as can be expected. It was fortunate that the already famous 'Gosmet' papyrus appeared in time to be included in this volume as an appendix; for as circumstances made it necessary to publish it with only the bare minimum of annotation,

Prof. Meyer's commentary, brief though it is, will be helpful to students of that (on the whole) well-preserved but none the less often puzzling text.

There are some misprints, and the paper is not of the best: but these defects are not to be wondered at in the circumstances. What is wonderful, and worthy of the highest praise, is the fact that amid all the difficulties of the time German scholars should be willing to write and German publishers to publish works of this kind, which can hope for no reward but the warm thanks of all students in the field of papyrology.

Kunstschutz im Kriege. (From *Zeitschrift für Bildende Kunst*, August, 1919.)
Pp. 47. Leipzig: E. A. Seemann.

Four summary accounts of the work done by the Central Powers during the war in the Balkans, Asia Minor, Syria and Mesopotamia respectively for the conservation and protection of archaeological sites and finds. The complete work is to consist of two volumes under the same title; vol. I. will be devoted to the Western front, while the other embraces all other areas and will incorporate the present chapters on the Balkans and the Turkish Empire, where the work done was not so much protective measures as actual archaeological research.

The publication, according to the general editor, Paul Cleinen, has admittedly a propagandist side, but we turn to the record of archaeological work accomplished. In the Balkans this does not seem to have amounted to much: H. Dugendorff speaks of grandiose projects for museums and excavations frustrated by the unfortunate incident of the *Dachstein* of 1918. Similarly, in western Asia Minor, beyond some damage by shell-fire to the Castle of Bairam, G. Káro can only speak of the destructive activities of Turkish stone-robbers. On the other hand, in Syria Th. Wiegand claims to have succeeded in interesting that curious personage Djemal 'the Butcher' in the work of conservation, and his report, which is by far the most solid document of the four, contains a long list of works inspected, repaired, or preserved from destruction. Even here, however, especially in the East Jordan territory, whole monuments have disappeared before the spread of cultivation. F. Sarre's notes on Mesopotamia are rather a record of aspirations than of work done. The chief value of the publication is in its illustrations, which include recent views of well-known monuments as well as reproductions of new discoveries. There are some interesting air-photographs.

Wissenschaftliche Veröffentlichungen des deutsch-türkischen Denkmalschutz-Kommandos. Herausgegeben von THEODOR WIEGAND. Heft 1.
Sini. By THEODOR WIEGAND. Pp. 145, viii plates, 141 illustrations in the text.
Berlin and Leipzig: W. de Gruyter & Co., 1920.

In this imposing work we have the first instalment of an ample publication of the results obtained in Syria and Palestine by the German Archaeological Commission during the war years, the activities of which have been summarised under the preceding title *Kunstschutz im Kriege*. As previously remarked, Wiegand appears to have been more continuously employed on archaeological work than his colleagues in other areas, and he was also successful in arousing the interest of the Turkish and German commanders in his labours of conservation: the former of these, Ahmed Djemal, he induced to write a preface to a picture-book which appeared in 1918 under the style of *Alle Denkmäler von Syrien, Palästina und Mesopotamien*, while the latter, General Kress von Kressenstein, actually contributes to the present work an account of the military operations in Sinai, which fills a third of the book. This *Journal* is not the place for a detailed criticism of

such an account; but to the present writer, who was on the other side of the Canal, it seems the best thing yet written about a little-known side-campaign.

The archaeological remains described in the remainder of the book are the ruins, mainly of Byzantine date, scattered on either side of the former Turko-Egyptian boundary. Most have been described before; there is in particular the account by Woolley and Lawrence in the 1914 *Annals of the Palestine Exploration Fund*. There is some new material, notably an interesting sanctuary on Mount Her and some palaeolithic implements from Kessama; but on the whole we do not think that the English publication need shrink from comparison. It is but fair, however, to add that Wiegand obviously worked under difficulties unknown in the piping times of peace; and his notes and pictures have the value of independent expert record of remnants upon which during every year of the war builders and road-men have laid heavy toll. The numerous aeroplane photographs are a novel feature, and to be commended.

Archaeologische Forschungen in Albanien und Montenegro. By C. PRASCHKE and A. SCHUBH. Pp. 104, 116 illustrations and a map. Vienna: Alfred Holder, 1919.

This is the eighth part of the publications of the Antiquarian Section of the Balkan Commission of the Vienna *Akademie der Wissenschaften*. It contains an account of two journeys in Northern Albania, which cover the area comprised between two districts which have already received detailed treatment in this series (to the south the Sanjak of Berat, part iii, and on the north Dacia in Montenegro, part vi). The journeys were made in 1916, under war conditions, and the second was hampered by bad weather. Exploration was naturally difficult under such circumstances, and the writers confine themselves largely to noting the present condition of previously known remains. On the first journey the route lay through Cetinje-Ducina-Metoon-Sentari-Lissas-Durazzo-Elbasan-Berat-Apollonia. At Lissas the site of Acrolissos was ascertained; a long section is devoted to the intricate topographical problems of Epidaurium-Dyrachium; and at Elbasan the late Roman *excavatio* was mapped. The second journey by reason of rain was confined to a ride along the eastern side of the Lake of Sentari. Of the numerous small finds and single objects recorded, mention may be made of a relief of Pan and the Nymphs from Durazzo, said to be a fourth-century Greek work, and a curious Hellenistic relief from Apollonia, which suggests the influence of the 'Gnathia' pottery of the opposite coast.

Harvard Studies in Classical Philology. Vols. XXVIII (1917), XXIX (1918), XXX (1919). Harvard University Press. 6s. 6d.

We summarise the contents of the various dissertations which are combined to make up the three latest volumes of this series:—

Vol. XXVIII. A. Philip McMahon, *On the Second Book of Aristotle's Poetics and the Source of Theophrastus's Definition of Tragedy*. The widely-held hypothesis that the *Poetics* consisted originally of two books, the second of which, containing the theory of comedy, has been lost since an early date, is unnecessary. The evidence is best explained on the theory that no second book ever existed.

G. L. Kittredge, *Chaucer's Lollius*. The mediaeval idea of a Roman poet Lollius who had written on the Trojan War is due to a blundered translation of Homer, *Epics* I. 2.

Evelyn Spring, *A Study of Exposition in Greek Tragedy*. Exposition is the art by which the dramatist puts his audience in possession of the preliminary information

necessary for the comprehension of the action. In this art Aeschylus excels the other tragedians; and in sheer technical dexterity he has been surpassed by no succeeding school of playwrights.

Vol. XXIX. W. C. Greene, *Plato's View of Poetry*. Plato's special utterances on poetry were moulded by special interests, and he formulates no general theory on the poetic faculty. His belief in the ideal world, however, led him to condemn most contemporary poetry as being content with the reproduction of material images.

J. W. White and E. Cary, *Collations of the MSS. of Aristophanes' Aves*, a complete collation of all known manuscripts.

G. W. Robinson, *Joseph Scaliger's Estimates of Ancient Authors*, a collection of passages from Scaliger's writings arranged alphabetically under the names of the authors mentioned.

Vol. XXX. J. W. White and E. Cary, *Collations of the MSS. of Aristophanes' Vespas*, in continuation of the collation of the *Birds* published in the preceding volume.

A. E. Boak, *Imperial Coronation Ceremonies of the Fifth and Sixth Centuries*. A study of the coronations of various Emperors at Constantinople from Leo I. to Justinian, and of the constitutional significance of the ceremonies.

L. R. Struthers, *The Rhetorical Structure of the Encomia of Claudius Claudianus*. A detailed analysis of Claudian's panegyrics, showing the care with which the division into eight sections in regular order is followed, as prescribed by the rhetoricians.

C. N. Jackson, *The Doves Seller in the Birds and the Professional Politician at Athens*, a study of the growth of the influence of rhetors in fifth-century Athens.

E. K. Rand, *Young Virgil's Poetry*, a lengthy survey of the minor poems, with the object of re-affirming the correctness of the tradition of Virgilian authorship.

Giuliano L'Apostata. *Saggio critico sui le Opere politiche e mitologiche tradotte e commentate* (= *Il Pensiero Greco*, XII.) By AGOSTO ROSTAGNI. Pp. vii+308+Index. Torino: Bocca, 1920. L. 28.

The latest work of Mommsen was devoted to the history of the fourth and fifth centuries of our era, and it is on these centuries that the attention of scholars seems more and more to be concentrating: gradually the main lines of the historical development are becoming clearer and the unsolved problems are being more precisely formulated. Through the labours of Seeck and Cumont, of Bidez and Guffcken, of Maurice and Mison, of Assis and Neumann and Schwartz we are coming to see the essential unity of that culture which was shared alike by Christian and Pagan: we begin to realise that both Christian and Pagan are pouring new wine into old winekins: we are conscious of that spiritual moribundity—that dominance of an inherited tradition from which neither Pagan nor Christians can shake themselves free. It is this aspect of the fourth century which Rostagni has studied in the introduction to his new book on the Emperor Julian. It is because the new thought will not adapt itself to the old forms that literature becomes largely imitative, that rhetoric grows ever more empty of living content, that Julian's most truly original work lies in his satire, itself an expression of this fundamental dissonance. From the partisanship which has long used the figure of the apostate emperor as a stalking horse, scholars are turning to new essays in understanding, to a fresh attempt to recover from a close study of his own writings the personality and the purpose of Julian. Here an accurate chronology is essential—this is what makes Bidez's recent papers of such importance—and in this task of reconstructing the development of Julian's thought the problem of the date of the Letter to Theonistus stands in the foreground. Are Guffcken and Bidez right in placing this letter in 361, or does it not rather date from the moment when Julian was turning from philosophy to face for the first time the duties of a practical administrator and soldier in the devastated provinces of Gaul?

Rostagni contents forcibly in his second appendix for the latter view, and no student of Julian's reign can afford to ignore his argument. It is instructive to make a careful comparison of Rostagni's translation with that of Mrs. Wright in the Loeb Library: the Italian scholar has greater space for his notes than the Loeb Library can give and his commentary is of real service. In his translation of the fragments of Julian's polemic against the Galileans he has, I think, in several cases successfully defended the MS. reading against the conjectural restorations of Neumann. For the English reader, at least, the interest of Rostagni's book will probably lie in his picture of Julian—not primarily a soldier, as Barbagnello sees him, but "an *intellettuale*" seeking to mould on a preconceived plan a recalcitrant world which refused to understand his aims—and in his treatment of the Letter to Theodorus and of the Misopogon, for it is perhaps in this letter and in this satire that the Emperor has given us most of his authentic self.

N. H. B.

How to Observe in Archaeology. *Suggestions for Travellers in the Near and Middle East.* Pp. 103. London: Printed by order of the Trustees of the British Museum, 1920. 2s. 6d.

This is a compressed manual of archaeological information of the most varied kinds, from the classification of flints down to the price to pay per square foot for papyrus. The object is explained by Sir F. G. Kenyon as being 'to provide information for the guidance of travellers in the Near and Middle East who are interested in antiquities without being trained archaeologists,' and its publication is the outcome of a recommendation made by the Archaeological Joint Committee, a body recently established, on the initiative of the British Academy and at the request of the Foreign Office, to focus the knowledge and experience of British scholars and archaeologists and to place it at the disposal of the Government when advice or information is needed upon matters connected with archaeological science.

An introductory chapter by Mr. G. F. Hill, the general editor, is followed by notes on equipment and method by Prof. Flinders Petrie; then come sections on Flint Implements, Greece Proper (J. P. Droop), Asia Minor (J. G. C. Anderson and J. L. Myres), Cyprus (J. L. Myres), Central and South Syria (D. G. Hogarth), Palestine (R. A. S. Macalister), Egypt (W. M. Flinders Petrie), and Mesopotamia (H. R. Hall). The information given aims at enabling the traveller to turn to scientific profit any chance discovery he may happen upon, and to recognise for himself the significance of potsherds or other small objects picked up or looted. Several plates of comparative alphabets, pottery types, and implements are provided, and at the end abstracts are given of the 'Laws of Antiquities' in force in the various areas.

Discovery in Greek Lands. *A Sketch of the principal Excavations and Discoveries of the last Fifty Years.* By F. H. Marshall. Pp. 127, 38 Plates, and Map. Cambridge: The University Press, 1920. 8s. 6d. net.

This unpretentious little work aims at giving 'the general reader some idea of the additions made by the excavations of the past fifty years to our knowledge of Ancient Greece'; but we are of opinion that the specialist also will find much of interest and profit in so careful and accurate a survey of recent discoveries, with its detailed bibliography and numerous illustrations of sites and finds.

The remains discussed extend from the earliest period down to Roman times; Mr. Marshall does not confine himself to mere description, but freely illustrates the significance of the individual finds in adding to our knowledge of Greek life or art. We

observe no mention of excavations in Cyprus later than of the Mycenaean period; and some reference might be desired to the finds at such sites as Kourou or Ollou. Mr. Marshall adheres strictly to his chronological limits; we could wish for some account, however summary, of the considerable work done by explorers like Newton, for instance, whose activity lies beyond 1870. But in saying this we simply imply that Mr. Marshall's work is so good that we ask for more; may the publishers soon be inspired to produce a similar account of the additions made to our knowledge of ancient times in the western half of the Mediterranean.

Le Culte des Héros chez les Grecs. By M. P. FOUCART. *Extrait des Mémoires de l'Académie des Inscriptions et Belles-Lettres, tome xlii.* Pp. 166. Paris: Imprimerie Nationale, 1918. 6 fr. 20.

In these days of anthropology and evolutionary theories, it is refreshing to turn to the clear-cut outlines and trenchant vigour of M. Foucart. In the present work he sketches the origin and nature, development and decay of the lowest class in the Greek hierarchy of supernatural beings, namely, the Heroes. The earliest stage of the Hero-cult he finds in the burial customs of the Mycenaean aristocracy: even after his death the lord was an object to be feared and propitiated in his tomb. As for the community, they mattered as little in death as in life. Though the belief seems alien to the Greeks of Homer, who burned their dead, it persisted throughout the Dark Ages and comes into prominence again in the seventh century B.C.; Aristomenes being the first historical character to be heroised. To these heroes of history or pre-history were added a number of others, deliberately invented, often with the connivance of the Oracles, to satisfy the natural desire of families to enhance the splendour of their pedigree, or of public bodies to secure themselves some supernatural protection. Athens held aloof from the later exorc for heroising for several reasons—there was a glut of heroes of the prehistoric period: it was contrary to the democratic instinct; and the Eleusinian mysteries gave a new turn to their eschatological conceptions. The one apparent exception, Sophocles-Dexion, is an example of a private hero, not of a public cult. But over the rest of the Greek world new hero-cults were constantly coming into existence, the colonies being especial sinners in this respect. Finally, by the time of the Empire we find masters heroising their slaves, pious citizens heroising themselves, and public bodies heroising dead infants as a mark of respect to the sorrowing parents.

Hellenistic Sculpture. By GUY DUKINS, sometime Lecturer and Fellow of St. John's College, Oxford, and Lecturer in Classical Archaeology in the University of Oxford. With a Preface by Professor PERCY GARDNER. Pp. xii + 99. Oxford: Clarendon Press, 1920. 16s. net.

This volume is not only a monument to a scholar whose death is a great loss to classical archaeology in England, but also a serious and suggestive contribution to our knowledge of Hellenistic art. It might well seem that into so short a space—less than 100 pages of large print—it would be impossible to compress any adequate discussion of the numerous and complicated questions involved. Dukins would doubtless have worked out many of the problems in more detail had he lived; but what he has given us suffices in many cases to indicate their solution, and his soundness and sobriety of judgment are joined to a real insight into the artistic character of the various schools.

Dukins challenges from the first the attribution of decadence to Hellenistic art, except as regards the schools of the mainland, to which Pliny's well-known saying,

'cassant diuinae ars' (200 B.C.), may well apply. But the great and flourishing schools of Pergamon, Alexandria and Rhodes are the true representatives of the Hellenic tradition. The book is mainly devoted to a study of their attainments and the distinctions between them. Beginning with the Pergamene, Dickins tries to reconstitute its character before the well-known monuments of the victories over the Gauls, and traces a mixed influence of Praxiteles and Scopos in its sensual and ecstatic qualities. He rightly attributes, in this connexion, the crouching Aphrodite to a Daidalos of Bithynia, not to Daidalos of Sicily; but has overlooked M. Th. Romach's proof, in *L'Histoire par les Monnaies*, that the true reading in Pline is Dasdalos, a Bithynian name. But for all the softness of surface modelling, it is noted that the Pergamenes used 'always towards clear cutting of hair and features; while the Alexandrines preferred an impassioned smoothing away of all sharp edges.'

This quality of a liquidly transparent surface, the Italian *veridicca*; 'the face seen almost through a slight haze,' is taken by Dickins as a test of Alexandrian work; examples are seen in the new Aphrodite from Cyrene, in the girl's head from Chios in Boston, and in the Eulabeia and Inoqua heads. These fall into their proper place, not as Praxitelean originals, for which some of them have been claimed, but as a peculiar development of a school derived from Athens. The whole group of works, which has hitherto been very puzzling, certainly seems better explained than on any previous hypothesis. One is reminded here of M. Perrot's criticism of Egyptian sculpture: 'The Egyptian,' he says, 'seems to see the human body through a fine veil, which hides from his view all accidents of surface and all unessential features.' It is at least a curious coincidence that a similar tendency should occur in the Alexandrian branch of Greek art.

The question of the so-called Hellenistic reliefs is discussed, and Dickins's conclusions will probably meet with general approval. He attributes the pastoral reliefs to Alexandria, the mythological to Rhodes, and the intimate and domestic scenes to Pergamon, while, of course, admitting considerable modifications in their adoption at Rome.

The Rhodian School, with its Lysippan traditions and its well-known groups, is also considered, and works like the Jason and the Borghese warrior assigned to it. The Subiaco boy, with its wonderful softness of modelling, seems strangely misplaced here. As to the Victory of Samothrace, Dickins surely goes too far in asserting that 'the statue has no connexion with the coin' of Demetrius Poliorcetes. The difference does not seem more than can easily be explained, and the coincidence would be strange indeed if there were no connexion. To judge from photographs, the figure on the coin has a high girdle like the statue, not a low one, as Dickins states, nor does the position of the right shoulder of the statue seem to make a trumpet impossible.

Incidentally, many well-known works are assigned to their proper relations: instances are to be seen in the Capitoline Aphrodite, as intermediate between the Cnidian and the Venus dei Medici; or the Aphrodite of Melos in relation to the many other instances of the half-draped type.

There are many details which require further discussion before any final conclusions can be reached. But Dickins has done a great service by laying down the broad lines of development of Hellenistic art. The illustrations are well reproduced and well chosen, and serve to enable any reader to follow most of the discussion in the text.

The 'Birds' of Aristophanes. By E. G. HARMAN. Pp. viii. + 135. London: Arnold, 1929. 10s. 6d.

This book belongs to a numerous class of commentaries on the *Birds* which set out to discover an undercurrent of political hostility beneath the apparent exuberance of nonsense in the play. The present variation on this theme assumes that the *parroia* to which Aristophanes' *antimachia* conveyed their meaning were the 'better-class'

Athenians, who sighed for a return of the constitution of Cleisthenes. These, as Mr. Harman suggests, 'would read in the blockade of the "gods" by the "birds" a scheme of Alcibiades for the conversion of the Athenian expeditionary force in Sicily into an anti-democratic armada, and the seizure of Sicily as a base for the reduction of Athens.'

It is impossible to prove or disprove in set terms the thesis maintained by Mr. Harman's school, for it must remain a matter of personal taste whether we prefer to take the *Birds* at its face value or explain it away as an allegory. But in the latter case we have a right to expect that the allegory should be apposite and telling. Mr. Harman's interpretations seldom fulfil these requirements. To take two instances: in l. 175 *egg*, the *eidolon* 'through which everything passes' is equated with Sicily as the prospective centre of the world's trade. Surely this does excessive violence to the economic map of the fifth century. In l. 660 *egg*, the olive tree which is to serve as the birds' temple is identified with the sacred olive on the Acropolis, 'where the Areopagus, the seat of government in old days, was situated.' But the Areopagus and the Acropolis are quite distinct hills. The most serious objections to Mr. Harman's theory, however, are based on broader grounds. As the author himself admits, Aristophanes sympathised with the moderate, not with the extreme oligarchs; but this party would certainly not have countenanced a reduction of the democracy by a 'Median famine.' And supposing that such a scheme had been stout in 415-4 B.C., there is no tangible evidence that Alcibiades favoured it, or that the expeditionary force would have lent itself to an anti-democratic enterprise. Mr. Harman's allegory therefore leads to nothing.

A word of praise is due to the introductory chapters, which contain a shrewd and well-balanced account of political conditions in Athens in the fifth century.

The Hittites. Schweich Lectures for 1918. By A. E. COWLEY. Pp. 94, 34 illustrations. London: H. Milford, 1920. 6s. net.

Of these three lectures the first two sum up, with extreme caution, what evidence was available up to the end of the War about the Hittite people, Hittite civilisation, and especially the languages spoken in the Hittite area. The third lecture is devoted to an essay in decipherment of the hieroglyphic script used by Hittite peoples, whether in the full pictographic style or in the conventionalised linear style. Here again Dr. Cowley shows great caution, claiming certainty for hardly any character-values, and making no attempt to suggest values for more than a very small proportion of the known signs, much less to interpret the few words conjecturally deciphered or dogmatise about the nature of the language or languages to which they may appertain. The lecture is very valuable for its demonstration of the uncertainty which still besets even the most collimentary interpretation of Hittite inscriptions, and the folly of basing any historical inferences on even proper names said to occur in them. In the second lecture the less desperate, but still most obscure, problem of the interpretation of Hittite documents in a known script, the Akkadian cuneiform, but in seven or eight languages or dialects, all of most doubtful affinities, is stated. Like Sayce, Dr. Cowley declines to endorse Hroony's confident discovery that the main native Cappadocian language is akin to Old Latin. Till that contention provides reasonable explanations of the Cappadocian words whose signification we know from the lexicographical tablets of Boghazköy, he turns it down. And, indeed, he could hardly do otherwise.

Dr. Cowley does not enter into any Hittite question in which the Eastern influences upon archaic Greek art are involved; but he throws out the hint that Lydian language and culture may prove to be intimately connected with the Hittite—more intimately indeed than the intermediate Phrygian. For further light on these interesting questions we have to wait, with what patience we may, for the resumption of the American excavations at Sardes, and perhaps for a revised publication of the Lydian inscriptions

already discovered. The whole subject of the Asiatic peoples and their culture, both early and late, is one that calls for elucidation, and there is room for any number of workers. Meanwhile, nothing better can be done than take stock of the known and the unknown to date; and this, in regard to what was probably the most important of all the Asiatic cultures, the Schweich lecturer for 1918 has done conveniently for us.

'Phéniciens.' *Essai de Contribution à l'Histoire antique de la Méditerranée.* Par C. AULIER. Pp. 146. Paris: Paul Geuthner, 1920. 30 fr.

When the Greeks of the classical age spoke of 'Phoenicians' as their schoolmasters in letters, art, and the higher civilization generally, they did not mean (though they were by no means clear on the point) the huckstering Semitic race of their own day, but an older people that had once held Tyre and Sidon. This was not Semitic but Caucasian, and from it were derived all those foreign names of gods and the like in which Hellenism abounded. From it too was derived the great gift of Minoan-Mycenaean culture. This people was really the Carian, or Caro-Lesgian, once spread over mainland Greece and the Isles, but surviving, as a recognizable entity of classical times, only in south-western Asia. Such is Monsieur Aulier's bold contention. He admits a *post hoc* at the outset. Only certain stocks, says he, have 'proved themselves dynamic in civilisation. The Semitic is not one of these. The Caucasian is. *Ergo* a race which the Greeks acknowledged for masters in culture cannot have been the former, and it is long odds it was the latter. Having posed his hypothesis he finds no difficulty in fortifying it by appeals to philology and Greek tradition, and to a less extent, archaeology. In the last sentence he acknowledges less competence, and confines himself to quotation of others, chiefly to produce a negative result. That is, he does not attempt much more than a demonstration of the poor quality of the work of the historical Phoenicians, as illustrated by discoveries in Syria, and especially in Punic Africa. But in the domain of Oriental Philology he makes great play. Claiming an acquaintance of twenty years' standing with most of the tongues spoken in antiquity from India to the Mediterranean, he subjects all the usually accepted Semitic elements in Greek god-names, etc., etc., to drastic destructive criticism; and, sweeping all the dust-beap, he points to an immense residuum of unexplained foreign words and things, which are not Semitic any more than Greek, but are, he is sure, Caucasian. Nor does he find greater difficulty in calling from Greek tradition any amount of confirmation in the shape of identification of 'Phoenicians' with Carians, Carian production of arts, crafts, etc., usually regarded as Phoenician. Carian penetration to all the regions in which the Syrian traders are said to have found their markets; and so forth. It is not quite clear whether he credits the Caro-Lesgians with having been actual Cretans and responsible for the invention and practice from the first of Minoan culture. If he means that, he will have difficulties with the very tradition on which he relies, for Herodotus, Thucydides, and Strabo—a strong combination—agree to distinguish the Caro-Lesgians from the Cretans, while they testify to intimate contact between the two peoples. But, whether or no, he certainly means that the Aegean torch was passed on to and by the Carian folk, and that much of what has survived to us of Minoan-Mycenaean art was its work. Thus, with the notable difference that he is anti-Semitic, does M. Aulier revive the contention of Helbig that 'Phoenicians' were the authors of the civilisation called Mycenaean.

Whatever be thought of the purpose and main contention of this Essay, there is no denying the learning and the industry that have gone to the making of it; and, irrespective of agreement or disagreement, it will be found a mine of evidence and full of suggestion. Nor has it been written in vain if it brings once more to the front the very great part which undoubtedly the Caro-Lesgians did play in the evolution of Hellenism. The most interesting and at the same time most obscure chapter in Aegean history concerns

that people or peoples. It was Cretan civilisation which occupied the west coast of Asia Minor before the Hellenic and made the rapid growth of Ionian culture possible. Carians were in the Black Sea and the Egyptian Delta before Greeks; and though they unquestionably were not the authors of Minoan culture, they seem to have been the first heirs of it. Does not Herodotus tell us that the Cretans themselves spoke of the Carians as the most famous people of the olden time?

L'Art gréco-buddhique du Gandhara. By A. Foucher. Vol. II., Premier Fascicule. Pp. 400, 4 plates, 175 illustrations in the text. Paris: E. Leroux, 1918. 25.

The first volume of this masterly work on the Buddhist art of North-West India received notice in the pages of this *Journal* as far back as 1907, and comprised descriptions of the buildings and bas-reliefs and the interpretation of the latter in the light of the Buddhist literary traditions. We now welcome the first part of volume two, containing an account of the statues. But it is much more than its title implies; it is an entire system of Buddhist iconography, comprising both relief work and statuary. Herein lies the feature which makes this part even more interesting than the former volume to the purely Occidental scholar, that the writer, in identifying the plastic types, traces and analyses more fully than previously the influence exercised upon these types by the Græco-Roman models in their strange environment. To give an instance; according to all literary tradition, Buddha should be represented with shaven head as a tonsured monk; but in the art of Gandhara his type has been treated by a craftsman whose hand had been trained to carve Western types of deities, and so to the end Buddha retains the wavy locks and *protuber* of a fourth-century Apollo. Yet in all save plastic type, M. Foucher bids us remark the complete subservience of the Græco-Roman influences to Oriental religious ideas and conceptions; the vigorously-treated Lysippean Hercules in Lahore (Fig. 325), for example, is no Hercules but a 'Yaksha,' and similarly the Athena (of Fig. 342) is no Greek deity but simply another type of the more ambiguous Indian lady figured alongside. In this connexion rises a point of unanimous interest; on the series of Græco-Indian coins, the deities admittedly begin as purely Hellenic in type and end as purely Indian; are they not Indian deities, even from the first? We await with interest the final part of this admirable work, in which M. Foucher will resume his conclusions on the history and subsequent influence of this far-flung ripple of the art of Greece.

The Cemetery of Pachyammos, Crete. By RICHARD R. SEAGER. Pp. 30, 21 Plates. University of Pennsylvania Museum: Anthropological Publications, Vol. VII., No. 1. Philadelphia: 1916.

Mr. R. R. Seager continues his useful publications of his excavations in the lathrums of Hierapetra, in Crete. He has regularly kept us up-to-date with regard to the results of his work. The present number of the 'University of Pennsylvania Museum Anthropological Publications' contains the records of excavations carried on in 1914 in a Minoan cemetery revealed on the beach at Pachyammos, the small harbour on the north coast of the lathrus, by a great storm in the previous year. The work furnished additional proof of the great subsidence which has taken place since Minoan times along this part of the coast. 'Fully half the burial jars were found standing in sea-water, and it seems hardly probable that this was the case at the time of interment.' The cemetery originally stood no doubt near the edge of a low cliff overlooking the sea at this point and the ground has since sunk, carrying with it the burials below the modern sea-level. The

island of Mochlos, not far off, was in Minoan days not an island at all but a peninsula, joined to the land by a small isthmus, on either side of which was a harbour. And on the larger side of Psira, off the coast, which of course was always an island, the houses of the ancient town descended from the hill into the sea; and from a boat one can look down into the dwellings of the Minoan inhabitants.

The cemetery seems to have continued in use from very early times down to the L.M. I. period. The discovery of child burials in E.M. III. pots, a small oval jarraz of apparently the same date, and a few stone vases of the early type sufficed to show that the first burials were contemporary with those discovered at Mochlos, Psira, and the Gournia cemetery at Sphoungaras. But 'whereas at Mochlos and Psira the greater number of graves dated from the E.M. period, here the M.M. I., M.M. III., and early L.M. I. periods play the most important part in the history of the cemetery.' As at Sphoungaras, and in contrast to Mochlos and Psira, the paucity of small objects found with the dead is notable; the majority of burial jars containing nothing but fragmentary human remains. No seal-stones were found. Mr. Seager gives some admirable reproductions of the best burial jars, which add many fine examples of Minoan ceramic decoration to the great number already known. The jar with the shoal of dolphins (Plate XIV.) is very fine, and Mr. Seager with it publishes, by permission of Sir Arthur Evans, who has not yet published it himself, the splendid fresco of dolphins and fish found in the Palace of Knossos. Both are of the M.M. III. period. Another good dolphin vase, of the transition from M.M. III. to L.M. I., is published in colour on Plate IX. Of all the vases published in the twenty-one plates the photographs and colour reproductions are excellent.

A notable feature of this necropolis is the evidence of the disregard of the Minoans for the graves of their forebears that it shows. Earlier interments were ruthlessly broken up and shored out of the way to make room for new ones. The burials were primary, that is to say, the bodies were placed in the jar soon after death and left there, crumpled up in a sitting position. They were put into the jars head downwards, and the jar was then placed on the ground bottom up. All the jars are small, and considerable force must have been used to cram the bodies into them. Secondhand or broken jars were often considered good enough for the dead. There was apparently no mark above ground of the existence of a cemetery.

We gain an interesting insight into the burial customs of the lesser folk of Minoan days from this excavation, and on this account it is worthy of special remark.

H. H.

Hittite Seals, with particular reference to the Ashmolean Collection.

By D. G. HOGARTH. Pp. 108, folio, 10 plates, 115 text-illustrations. Oxford: The University Press, 1920. £3 18s. 6d.

Mr. Hogarth in this handsomely printed and illustrated volume has published the remarkable collection of Hittite or Syro-Cappadocian seals in the Ashmolean Museum, which he has made the most important in existence. In the ten photographic plates at the end of the book 336 seals of this collection are finely reproduced, and in the text 115 other examples are illustrated, chiefly from the British Museum collection. We have now for the first time an adequate publication of these interesting monuments of the early art of Asia Minor and Northern Syria, with an illuminating commentary by Mr. Hogarth, which in many respects throws new light upon various debated questions as to the meaning of their engraved designs and as to their date. With regard to their origin there is no question at issue. They are what Mr. Hogarth shortly calls 'the Hittite Glyptic,' the glyptic art of the remarkable early people of Anatolia and Northern Syria which has been conclusively identified with the Kheta or Khatti of the Egyptians and Mesopotamians, the 'Children of Heth' or Hittites of the Bible, whose remarkable monuments from Boghaz-Koi, Yasil-Kaya, Eryuk, Carahemish, and elsewhere, with

their peculiar hieroglyphic inscriptions, have recently been republished in a handy form in Dr. A. E. Cowley's *Schwartz Lectures for 1918*. The Hittite hieroglyphs not seldom appear upon the seals, and the whole *façade* of their designs demonstrably belongs to the same art as the greater monuments associated with the Hittites. They show also, as was to be expected, many points of contact with Minoan glyptic art on the one side and with Babylonian on the other, more in the later examples are Egyptian influences indiscernible. The existence, which is now certain, of a Semitic Babylonian population in the cis-Taurus region (the district of Argasus and Cameros, *Mazos*, the modern *Kaisariyeh*), as early as the time of the Dynasty of Ur 'of the Chaldeans,' about 2500 B.C., which was later extinguished, no doubt by the Hittites, gives us the reason of the strong Babylonian elements in Hittite glyptic. Mr. Hogarth also makes several interesting references to the hypothetical Minoan-Hittite *Mixtura* of the Eastern Keffians of Cilicia, where, in all probability, the land of Alashiya so often mentioned in the Egyptian inscriptions and in the uniform Tell-el-Amarna letters is to be placed. And this mixed art is closely connected with the early art of Cyprus, where from the fifteenth or fourteenth century B.C. onwards we see occidental and oriental artistic elements always contending for the mastery. One speaks of this presumably Cilician art as hypothetical, because no excavations have as yet been carried out in Cilicia which would give us archaeological authority for so describing it. There can, however, be little doubt that, if ever in the future excavations are made, presumably now under French auspices, in Cilicia, the strata of the later Bronze Age will yield the characteristic seals, ivory carvings, and other objects, hitherto found chiefly in Syria, in Cyprus or in Egypt, which are on many cogent grounds to be assigned to Cilicia as their place of origin. To distinguish the products of this mixed art from those of the fine Hittite style is a study of the greatest interest, and it is to be hoped that Mr. Hogarth will later on publish a study of the works of the presumed Cilician style, to which many of the supposed Minoan objects discovered in Cyprus and in Egypt should in reality belong. So far as the genuinely Hittite art is concerned, he has in this commentary on the seals written a most useful study of its characteristics as revealed in the domain of smaller objects, and his chapter on the 'Dating and Local Origin' of the seals furnishes conclusive arguments for the dating of the larger monuments, which will commend themselves to all who understand matters of artistic style, and do not need the authority of an inscription to tell them the approximate date of an ancient work of art.

H. H.

L'Hellénisme primitif de la Macédoine prouvé par la Numismatique et l'Or du Pangée. Par J. N. Svoronos. Pp. 262, with 19 Plates and Maps, an Index. Paris: Leroux; Athens: Eleftheroudakis, 1913.

One of the chief faults of this book is apparent in its title. If the author had realised that to demonstrate the Hellenic character of the population inhabiting North Eastern Macedonia two thousand years ago does not assist the solution of present-day political problems he might have produced a more scientific work. This is not to say that the book is mere propaganda; there is too much special pleading; conclusions based on far too slender grounds are continually used as springboards for further plunges; but if the reader will persevere to the end of the book in spite of its haphazard arrangement and too numerous wrong references he will find that his ideas have had a thorough shake-up and that several attributions which he had hitherto accepted without question are now well grounded.

The work falls into two parts: in the first (of which the substance has already appeared in the *Journal International d'Archéologie Numismatique* for 1913), the author takes the series of archaic silver coins recognised by numismatists generally as being of Thracian-Macedonian origin—some of them inscribed with the names of more or less

known tribes—adds to them several more, on grounds of type, fabric or symbol, and attempts to assign them to various Paenonian tribes or Hellenic cities whose position he proceeds to locate in the districts between the Axios and the Nestos. In the second part he sets himself to identify the gold coinage which he thinks must have been struck in these same districts in view of the rich gold mines which they contain, and this leads him to transfer thither much of the primitive electrum coinage hitherto given to Ionia and notably the so-called Ionian-revolt issues.

In the first part the symbols on which M. Svoronos relies as evidence of Paenonian origin are two: a lotiform flower (the Pangaean rose?), and a disk sometimes floral, sometimes solar. But though the appearance of either of these two symbols on a coin suggests at once that it may have been struck in Macedonia, it is by no means conclusive evidence: for instance there is a typical 'Pangaean' rose as symbol on an archaic coin of Larissa in Thessaly (B.M.C. No. 6) and an equally typical disk symbol on a coin of Idalion with the type of the sphinx (B.M.C. 2-4). So typical indeed is the latter that M. Svoronos apparently regards the coin as Macedonian (see his Pl. XVII. 13), but its Cypriot origin is beyond dispute as apart from questions of type and fabric all the three coins of this class in the B.M. were found at Dalis itself. The general method adopted is interesting, but should also be handled with far more caution than is here employed. The author supposes that the boundaries of the *profectures* into which the country was divided under Turkish rule, drawn as they were along physical and economic lines, are traditional, and outline what must always have been local units inhabited by tribes or tribal groups. He then takes such coins as bear ethnic inscriptions and with prevalence as a pointer, aided out by the scanty literary evidence, he searches the map for a modern place name which may conceal the classical ethnic. Thus the Derrones are located (probably with justice) near Lake Doiran, the Tymoni near Trimess and so on. With two or three points thus fixed to his satisfaction the rest follows easily—the more so perhaps as the bulk of the coinage is uninscribed. Arguing in turn from analogy of type, symbol and weight standard, he distributes the remaining coins among tribes whose location he attempts with more or less success. We may admire the dexterity with which the juggler keeps so many balls in the air at the same time and his address in throwing up another to distract our attention directly one falls to the ground, but there the matter ends as regards the majority of the attributions. The cautious numismatist must still be content to class the bulk of these coins under the vague title of Thracio-Macedonian. Incidentally, however, many interesting points are raised of which only a few can be taken here. The attribution of the hitherto uncertain coins with the sphinx type and legend $\Lambda\Xi$, . . . to Assorus is tempting and will probably find acceptance: it is a curious coincidence that there was an important cult of Artemis at Assorus just as there was at Perge, one of the very few other places which used the sphinx type. The octadrachms of the Derronian group with Pegasus for reverse type and a legend hitherto regarded as obliterated, are described with considerable likelihood to the Laeni, a tribe mentioned by Thucydides, and the didrachms with the goat type hitherto attributed on insufficient grounds to Aegae are attributed to the same group on the strength of the monograms $\Delta\Xi$ (Derronia) and $\Lambda\Lambda$ (Laeni). The latter attribution is, however, not without difficulty, for the goat-type coins of the Laeni, although without reverse type and therefore earlier, are of better style than their octadrachms. M. Svoronos holds that there was no regal Macedonian coinage before Alexander I. and assumes (which is more doubtful) that the kings allowed no city of theirs to exercise a right which they did not use themselves. We have seen how he deals with the coins formerly given to Aegae, but he has also to find a new home for those bearing the ethnic $(\chi\eta\alpha)\Omega\Omega$ hitherto assigned to that Iohnae on the Thracian Gulf. Now Stephanus mentions an Iohnae in Eastern Macedonia and the author assigns the coins in question to this city, which he locates at Zichia (*i.e.* Ichna), east of the Strymon, justly remarking that both the types and the high weight of the coins find their closest analogies in the coins of the neighbouring Edonae and Orreoei. Before leaving the first part it may be remarked that the legend of the coins with the rose and bear types (Pl. XVI. 43 and 50), on strength of which these

pieces have been assigned to Methone, is in the one case highly problematic and in the other non-existent, and that the attribution to Sirois of the series with the type of the horse-Silenus and nymph, formerly given to Lato, breaks down for a similar reason, for while their legend, whatever it may be, does not look like $\Lambda\epsilon\tau\alpha\iota\omicron$, still less does it resemble $\Sigma\iota\rho\iota\omicron\omicron\omicron$.

The same general criticism applies when M. Svoronos in his second part attacks the question—Are there early gold or electrum coins assignable to Macedonia? He makes such large claims that in pure irritation we are apt to negative them all. His view that the electrum coinage currently assigned to the Ionian revolt was in reality struck in the districts round Myrcinus under Milesian influence has already been dealt with in a review by Mr. Hill in the *Nomismatist Chronicle* (1914, p. 312) and need not be further discussed here except to say that the presence of the coins is overwhelmingly Ionian. Some of the other attributions, however, require more serious consideration. There are three lines of argument that may be followed, the argument from style and fabric, from type and from provenance. The first and especially the question of fabric is here ignored; all the certain Thracio-Macedonian silver coins without reverse type have a shallow incuse square set in a noticeably flat field, the majority of electrum coins on the contrary have a comparatively deep incuse in a rough field, and the other evidence would have to be very strong before we could accept a common place of origin for two such different fabrics. There are, however, certain electrum coins with a flat reverse fabric and some of these may well be Macedonian. For example, the stater at Munich with the griffin's head type and the hitherto unexplained inscription $\Sigma\iota\omicron\epsilon$ (here Pl. XV. 1), formerly given to Trso, is connected by M. Svoronos with the bovery pieces of the griffin type (already recognised by von Fritze as not belonging to Alabera) and temptingly assigned to the Dii. Again the type of the electrum coins with the goose and lizard is so exceptional that it is almost impossible to separate it from the silver Thracio-Macedonian coins of the same type and their provenance seems generally Macedonian. The same may be said of the electrum pieces with the curious type of the quartered cube (here explained as an *agot*) and in so far the claim that they are Macedonian may be provisionally accepted. Provenance indeed must in the end be the chief argument in such attributions if only sufficient evidence is forthcoming, and it may therefore be worth while to give the results of an examination from this point of view of some of the coins in the British Museum assigned by M. Svoronos to Macedonia. Of eight examples of the pieces with the solar disk in various forms (here Pl. XVI. 6-8, 25 etc.) two are known to have been found in Asia Minor, one was brought from Smyrna, two came with parcels of other coins from Asia Minor, two came from collections formed mainly in Smyrna, while the provenance of the remaining one is quite uncertain. They therefore seem to be Asiatic, though as far as fabric goes some of them might be Macedonian. The electrum staters with the gorgoneion type are brought by M. Svoronos into connexion with the silver coins usually given to Neapolis Dateron, but of the two examples known, that in the Waddington Collection was found in the Dardanelles and the other came to the British Museum in a parcel of other Asiatic coins. Apart from this the electrum pieces have a reverse type which the silver have not, and their styles are quite different. Again, of the two pieces with the Pegasus type (Pl. XV. 26) the one whose provenance is known came direct from Smyrna, and in any case the fabric seems typically Asiatic. To proceed would be to turn a review into an article, but enough has been said to indicate that while M. Svoronos' exuberance should be heartily discounted it should not blind us to the suggestiveness of many of his conclusions and in particular to the ones he makes against those who would assign all electrum coinage without exception to Asia Minor.

Delphi. By FÉLIX DE PETRISSE. Translated by G. C. RICHARDS, with a Preface by Percy GRAVES. Pp. xi + 338, with 164 illustrations in the text. London: Gydenal, 1920. 21s. net.

As Professor Gardner observes in his introduction, it is not easy for the English scholar, who does not happen to be an archaeological expert, to form any idea of the additions made to our knowledge of ancient life and art by the recent excavations on the sites of the centres of Greek life. The official publications are bulky, expensive and often as yet incomplete, and other sources of information are scattered up and down in many tongues and many learned journals. Athens and the prehistoric sites form an exception, but Delos, Olympia, Delphi, Miletus and many other sites remain in consequence very imperfectly known. To take for instance Delphi, the subject of the present work: all the world knows the Charioteer and perhaps the Agias; but to obtain any idea of the site as a whole would be a task involving much laborious research; the only detailed account in English we can recall at the moment is that given in the notes of Finley's *Pausanias*; and this is mainly topographical and contains no illustrations.

As far as one site is concerned, the present work worthily fills the gap. First come introductory chapters dealing with the cult of Apollo, the oracle and the part played by Delphi in Greek history, then in chronological order and with ample illustrations the principal remains are described, the conflicting theories as to identification or chronology briefly discussed and their contributions to our knowledge of art illustrated. No better hand could have been found to write such a book than that of M. Poulsen, the learned keeper of the Ny-Carlsberg Collection at Copenhagen; he knows his site thoroughly and has the advantage of utilising hitherto unpublished material of his master, the veteran excavator, M. Homolle. Perhaps the best part of the book is the controversial, where conflicting theories are exposed with admirable lucidity and brevity, and judgment passed upon them in no uncertain terms: the unfortunate Ponton comes in for especially severe castigation in this respect. The book was written originally in Danish in 1919; the translator, Mr. G. C. Richards, has admirably preserved the nervous force and crisp style of the original. The illustrations are excellent.

Orpheus. Eine religionsgeschichtliche Untersuchung. By OTTO KECK, with a supplement by JOSEPH STARYGOWSKI. Pp. 89, with portrait and two plates. Berlin: Weidmann, 1920. M. 5.

Four essays apparently forming part of a *Festschrift* offered to Carl Robert by his pupils. The first part is a re-examination of the legend of Orpheus in literature, leading to the conclusion that the figure of Orpheus, as the fountain-head of the Orphic sect, is of much later appearance in Greek religion than has been supposed. The Orphic Theogony is next examined in comparison with the other Theogonies; its main difference in contrast with, e.g., the Hesiodic system, is its moralising tendency. The third essay deals with the well-known Orphic myth of the death of Zagreus and the part played by the 'Child' in the Greek mystery-religions.

The fourth essay is an independent production by Starygowski entitled *Orpheus—und verwandte mythische Bilder*, and is illustrated by two plates. The type of Orpheus in art is one of a cycle of representations of the Good Shepherd in the midst of his flock, and this cycle should be traced back through Christian and Classical art to Persian and to Mandaean influences.

L'Arménie entre Byzance et l'Islam depuis la Conquête Arabe jusqu'en 886. Par J. LAURENT. (Bibliothèque des Ecoles françaises d'Athènes et de Rome, Fasc. 117.) Pp. 336, 1 map. Paris: Fontemoing et Cie, 1919. 20 fr.

This is the first part of what promises to be a most exhaustive study of the mediæval history of Armenia by a French scholar whose profound knowledge of the sources renders him most competent to do it. This volume covers the period from the Arab conquest in the seventh century to the revival of the Armenian monarchy under Ashot in the ninth. The position of Armenia in this period between the Byzantine and Arab empires was an interesting one. By the treaty of 637 a.d. the Armenians became nominally vassals of the Caliph but retained so much of their feudal liberties, and especially religious freedom, that in spite of the presence of Arab governors they had practical autonomy. Byzantium, on the other hand, never gave up its claim to sovereignty. Neither the Byzantine emperor nor the Caliph had much affection for this turbulent people, but they recognised the importance of having them as a bulwark on the frontier. The Arabs could not risk throwing Armenia entirely on the side of the Greeks, while the Emperor felt that a strong Armenia was a defence to the Rhoenians. The Armenians, however, neither agreed among themselves nor with their neighbours, so that autonomy did not become independence while the Arab empire flourished. By the middle of the ninth century, however, the Abbasid Caliphate was tottering; a strong Emperor had ascended the throne of Constantinople in Basil the Macedonian (really of Armenian origin) and was turning his attention eastwards.

Armenia was then courted by the Caliph, who allowed her to choose her own governors, and by the Emperor, who opportunely discovered the virtues of St. Gregory and found in Constantinople relics of him and of other Armenian saints. Armenia might have at once derived considerable advantage from the situation had she been united, but for twenty years the intrigues of Arabs and Byzantines postponed the success of the efforts of the able if not over-scrupulous prince Ashot Bagratuni to consolidate Armenia. It was not till 886 that the Caliph finally recognised the latter as king of Armenia, and the Emperor, still adhering to the fiction of his suzerainty over Armenia, sent him a golden crown.

How nominal was the restoration of the Armenian monarchy was revealed on his death, when the country very soon had as many kings as it had previously had prince-bishops, with the result that it soon passed under Byzantium.

M. Laurent's present volume stops with the death of Ashot I. It is a singularly important study of anteconquest Armenia, its history, economic conditions and prosperity under the Arabs. Appendices deal with the topography and geographical nomenclature of Armenia, the questions of the autonomy of the Armenian church, the Arab principalities of Armenia, and conclude with exhaustive genealogical lists and bibliographies. The book has a very full index. Students of the mediæval history of the nearer East will await future volumes with interest.

Byzance et les Turcs Seljoukides dans l'Asie Occidentale jusqu'en 1081. Par J. LAURENT. (Annales de l'Est, 28^e Année, Fascicule 2.) Pp. 141, 1 map. Nancy: Berger-Levrault, 1919. 7 fr.

Our sources for the early history of the Seljuk invasion of Asia Minor are not satisfactory. It is difficult to give a detailed picture of its progress and to distinguish destructive raids from permanent conquests. There are no contemporary Muhammadan authorities and the later Arab historians do not deal in any detail with this period. The Armenian historians have a strong bias against the 'impotent, effeminate and ignominious' nation of the Greeks, and, on the whole, are not sufficiently interested in the Greeks to record their fortunes. The Byzantine writers can hardly be expected to preserve for

posterity a full record of their defeat. M. Laurent has examined all the sources for the history of Asia Minor from 1025 to 1081, and by judicious sifting of the evidence has given a remarkably clear account of the gradual collapse of Greek power in Western Asia. After the death of Basil II. in 1025 the Byzantine Empire was ruled by a continually changing series of incompetent, foolish, or extravagant Emperors until the accession of Alexius I. in 1081. They still had able generals in plenty, but they had no longer the armies necessary. The country was devastated by continual civil wars, favourites held the principal offices in Constantinople, and the generals in the field were under incompetent civilian control. Jealousy of the power of the great families of Asia Minor led to the abolition of their local militias which had formed a strong line of defence to the Empire. Economies were effected at the expense of the army and recruiting was neglected. The result was the catastrophe of 1071 when Romanus Diogenes, who was by no means lacking in military qualities, with his ill-equipped raw levies was completely routed at Manzikert. For the next ten years we find Byzantine armies in Asia Minor, but they are usually fighting with each other. Frankish mercenaries like Crispin gathered armies round them and took the defence of the country into their own hands, but this and the consolidation of the Armenians under Philaretos resulted only in further disorganisation. Within a year or two of Manzikert the Turks had devastated Asia Minor, but they had not conquered it. They were still wandering nomads, but they so ruined the country that the Greeks disappeared before them.

When rivals to the throne like Botaniates and Meliszenos seduced Turks into their service and stationed them to their towns, these mercenaries soon began to show their independence. The Turks themselves were not yet a united force; they remained scattered bands of nomads and, but for the lack of unity among the Christians, it should have been an easy matter to dispose of them. Alexius Comnenus was the man who could have done this; but he had first to create an army and then use it against the Normans in Illyria and Thessaly before he could turn his attention to the East. When he did turn against the Seljuks it was with fair success, but the moment when they might have been swept out of Asia Minor had passed.

M. Laurent's book is the most thorough account of an important period that has yet appeared and his voluminous notes and extensive bibliography give some idea of the amount of labour this excellent work has cost him.

The Inscriptions of Sinai. By ALAN H. GARFINKL, D.Litt., and T. ERIC PEET, B.A.
Part I. Introduction and Plates. Pp. 19, 86 plates. London: Egypt Exploration Fund, 1917.

One of the most important archaeological publications issued in England during recent years is that of the Inscriptions of Sinai, published by the Egypt Exploration Fund. The book is a corpus of all the known hieroglyphic and hieratic inscriptions in the peninsula, both still extant and now destroyed, based chiefly upon the copies made by the Fund's expedition of 1894 under Professor Petrie, and on a collection of specimens, made many years ago, now in the British Museum. The work is then a publication of the labours of the Fund's archaeologists *plus* a great amount of older and hitherto unpublished material. Its importance for the study of Egyptian epigraphy can hardly be overestimated. Several years ago an unparalleled outrage was committed by some British engineers sent out to Sinai by a commercial company to prospect for metals. They destroyed one of the oldest and finest inscriptions with pick and hammer. The publication of the remainder becomes an urgent necessity in view of possible repetitions of such acts of ignorant barbarity. As the inscriptions, though beginning as early as the First Dynasty (3500 B.C.), cease with the Twentieth (1100 B.C.), no Greek or Graeco-Egyptian bi-lingual inscriptions occur, so that nothing specially interesting to Hellenic students

Again, there is (not immaturally) a tendency throughout to attribute to Egyptian theology a coherence and logical definiteness which one may doubt whether it possessed. Thus on p. 451 it is argued that since in ancient Egypt the sacrificial offerings were not burnt, but, after being offered, were removed and consumed by the priests, 'kann nicht der Wamsch obgewandt haben, dem Gotte Speisen zum Essen darzubringen'; the god received the 'food' which was in the offerings back into himself 'durch Saugen'. The logic is sound, and some such blue as Preblich indicates may actually have been at work, but the argument is not so conclusive as it looks. The primitive mind (and in dealing with Egyptian religion we are constantly confronted by very primitive conceptions) is logical in its way, but its logic is not our logic and does not exclude the simultaneous holding of incommensent conceptions. A child, for example, will set its food before a doll and then eat it itself; one half of its mind knows that the quantity of food is undiminished, but the other half is sufficiently under the spell of its symbolism to feel gratuitously distressed if the food is withheld from the doll.

It is another result of his too logical treatment of the subject that Frahm is apt to lay excessive weight on a single motive, that of the 'fluid'. He suggests for example (p. 38) that Akhenaton's main motive in transferring his capital from Thebes to Tell-el-Amarna may have been his anxiety to get away from a place where the power of the Ammon 'fluid' was specially strong; but surely the concrete power of the Ammon priesthood, long established at Thebes and supported by local sentiment, was a quite adequate reason for the removal. It may be pointed out by the way that the statement on p. 17 that the representation of the sun with the rays terminating in hands cannot be proved before Akhenaton's reign is perhaps open to doubt: is there not an instance in the palace of Anamaphis III?

If, however, one cannot but feel doubts as to the correctness of some of Preisigke's views, it must be admitted that his book is a very interesting and suggestive one, and it may be that more competent Egyptian scholars than the present reviewer will be more disposed to accept the theory which it enunciates.

Le Texte d'Aristophane et ses Commentateurs. By PIERRE BOUSSAC.
Pp. 204. Paris: Fontemoine, 1919.

Pierre Boudreaux fell on December 15th, 1914, aged 32, leaving the manuscript of this book, which has been prepared for press by M. Georges Menant of the University of Saclat. An introduction is contributed by M. Haussoullier.

The book contains an account of the critical work done upon Aristophanes from Alexandrian and post-Alexandrian times down to the Antoninian grammarians and the period of the first collection of scholia. The subject—interesting but little remunerative, seeing that there are next to no new facts, and papyri are unusually sterile—is treated with diligence and ability, and the literature, for the most part of little value, is taken ample and almost too ample account of. The book betrays here and there its incompleteness, but the author succeeds in investing the various grammarians with more individuality than had hitherto been done. He relieves us once and for all of the need of consulting the gray minor philological literature of the nineteenth century. The author's tone is independent, and he deservedly chastises Rutherford's eccentricities and the presumptuousness of Wilamowitz. It is the more to be regretted that he was not allowed time to produce an original and exhaustive history of the department, based on a new interpretation of the originals: the errors of past philology are evident on every page and could not have escaped the author's mature reflection. I will mention one: the curious scholion *Bica 150b* is usually printed as *ἡ Ἀττικὴ ἀπὸς ὁδοῦ καὶ τὸ πρὸς τὴν ἑσπέρην*, from which it is inferred that an Attic or Pergamene edition existed as late a period, a conception at variance with all we know of ancient publishing. The MS.

reads, as the author notes, *de viis divitiarum*. The Attia will have been publishers (like Atticus with his *Arrears*), in the late pagan period to which we would naturally assign the scholia.

This is not to detract the merit of a man to whom we owe more than books.

T. W. A.

Die griechischen und lateinischen Nachrichten über die persische Religion.

By CARL CLEMEN. Pp. 232. Gießen: Alfred Topelmann. 1929. M. 40.

Fate has dealt so cruelly with the literature of ancient Persia that high importance still attaches to the many notices of Iranian religion preserved in Greek and Roman sources. Professor Clemen, who has published the original texts in his *Fontes historici religionis Persicae*, in his new work examines in detail their value for our knowledge of the origin and growth of the religion revealed to us in the Avesta and in Pahlavi texts, and less directly in the inscriptions of the Persian kings. While there is no independent criticism of the native sources, the author's knowledge of the literature is extensive; unfortunately he has yielded to the temptation to display erudition at the expense of lucidity, and by adopting an arrangement based merely on the dates of the authors cited he has been compelled to repeat more than once the same arguments. But in the main his judgment is sound, if not original, and the painstaking completeness of his arguments renders them valuable even when they are unconvincing.

On the strength of the evidence of Xanthos the author accepts the view which places Zoroaster's date not later than 1000 B.C., a date far more plausible than that contended for by Jackson in his *Zoroaster*. But his attempt to prove that Zoroaster was not merely born in Western Iran, but that his life-work was performed there and not in Baktria, implies a faith in the testimony of Chores of Mytilene which the nature of his notice entirely precludes; the balance of evidence is clearly in favour of Baktria as the scene of the reformer's efforts. On the other hand the rejection (pp. 43, 44) of Moulton's effort to find a reminiscence of Zoroaster's childhood in Vergil's Fourth Eclogue is convincing. The discussion of the fascinating question of the religion of Cyrus, Cambyses, and Darius (pp. 54-77) is careful and complete, and the conclusion that all three were Zoroastrians is far from implausible; of special interest is the argument (pp. 115-21) in refutation of the common opinion that the mode of burial of the Achaemenidae is inconsistent with the prescriptions of the Avesta. Here, as throughout, the classical notices are handled with care and discretion, while full use is made of Fraser's rich collections of sacred rites, and his treatment of the Saken is defended (pp. 125, 126), not very convincingly, against Jeffken's criticisms.

War conditions doubtless explain some omissions inconsistent with the author's general love for completeness. Thus on p. 40 Kennedy appears as the latest authority for the date of Kanishka, ignoring Marshall's decisive arguments (*J.R.A.S.* 1914, pp. 975-86; 1915, pp. 191-2, and elsewhere). No reference is made to Carnoy's *Iranian Mythology*, and the refutation (pp. 205-23) of Moulton's theory of the aboriginal character of the Magi would have been more interesting had it been possible for the author to take account of the objections raised to the suggestion in *J.R.A.S.* 1915, pp. 790-9. But the two criticisms are supplementary to each other, and the conclusion is unavoidable that we cannot now hope to draw a line of distinction in point of race between Zoroaster and the Magi, among whom Xanthos appears to have reckoned him.

The author doubts (p. 96) the correctness of Aeschylus's information when in the *Persai* he represents Atossa as styled wife and mother of the god of the Persians, on the ground that there is no other early evidence of deification of the Persian king. The doubt seems needless, nor is there any special reason obvious for an invention of the idea by Aeschylus, while Theopompus's narrative (p. 131) of the episode of the Argive Nikostratos suggests that the belief in the divinity of the king was an early conception which might easily have developed with the extraordinary success of the founders of the

monarchy; the absence of any Vedic evidence of the sacred character of the kingship, coupled with the silence of the *Arveda*, forbids us to treat it as a primitive conception among the Indo-Iranians. The Indian belief that the gods, unlike men, cast no shadows sheds light on the assertion of Theopompus (p. 129) that in the end when the strife of the good and the evil deities is over men will be blessed, neither needing food nor casting shadows. On the other hand, it is very dubious if the famous dialogue of Yama and Yami in the *Rigveda* (x. 10) should be invoked (p. 211) to establish that the practice of sister-marriage had its origin in some region in the neighbourhood of India. The problem there dealt with has every appearance of arising from a purely mythological cause, the conception of the origin of man from a pair of twins; it stands on a firm with the doctrine of the incest of Porrigon with his daughter, and in neither case is it natural or plausible to see any comment on contemporary customs.

Prof. Clamen accepts (p. 84) Eitrem's explanation of the rationale of the march of an army between the portions of a victim for purposes of purification, but does not meet the objections to that theory (*J.H.S.* xxxii. 238). The cutting of hair and the tearing of clothes in mourning he holds (p. 124) to be a device to render the mourner unrecognisable by the dead or the spirit of death, a view which is at least too narrow, so natural are these acts as expressions of primitive grief. Nor is it certain that we can accept the suggestion (p. 142) that the Magi touched the victim with slender twigs because there was believed to be latent in the twigs supernatural power. This theory assumes, without sufficient grounds, that the twigs were of some special kind, saunders, myrtle, or laurel, and it is at least no probable that the reason for thus touching the victim was to secure for the priests' contact with the divine spirit which is assumed to come down to partake of the sacrifice. Possibly it was in this way that the grass shrouded for the sacrifice, which marked the old Indo-Iranian sacrifice, passed over into the barrow of the Parsi, a bundle of twigs held in the priest's hand; the priest may first have used a handful of grass with which to touch the victim, and later adopted twigs as a more effective means. The choice of the specific material of the twigs may have been influenced by other considerations, but Prof. Clamen's view gives no adequate ground for the origin of the practice.

The index does much less than justice to the work, while the absence of cross-references is confusing. The author has also given a needlessly repellent aspect to his reproduction of Iranian names by adopting Bartholomae's transliteration, but insisting on giving the nominatives instead of the stem. Kanerkes (p. 40) and Hoyerkes (p. 104) are no more than *kanerkes*, the *r* standing for *k*, and it is hardly profitable to explain away to the engraver's credit the appearance on a coin of Harjaka's of a goddess more who recalls precisely the quaint notice of Mithra in Herodotus, i. 131.

A. BERNHARD KEITH.

Beiträge zur griechischen Religionsgeschichte. III. (Videnskapskapskrift. 11. Hist.-Filos. Klasse, 1919. No. 2.) By S. EITREM. Pp. 302. Kristiania: Jacob Dybwad, 1920.

Dr. Eitrem's latest contribution to Greek religion falls into two nearly equal portions; in the first four chapters he supplements the descriptions of Greek cult in his *Opferkult und Vorepfe* treated in this *Journal*, xxvi. 197), while in the last three he discusses the relation of Alcides and the Karkonos, pairs in mythology, and the mythological significance of the old legends of the founders of the Greek colonies. The results achieved in the second part are, on the whole, disappointing. The effort to prove that the original home of the Karkonos is the western Peloponnese is far from satisfactory, and the attempt (pp. 127-9) to discover in the *Iliad* proof that Alcides's original home was in Arcadia is wholly unconvincing. The same verdict must be passed on the long chapter (pp. 151-92) devoted to proving that the Greeks had no reliable information

regarding the founders of their early colonies and supplied the defect by the invention of names, historically valueless, but important for myth and cult. The process is simple: an Arelma and a Theoklia are obviously susceptible of explanation, but so unfortunately is Demosthene. The problem is a difficult one, but careful examination of the details of the discussion will probably satisfy any student of its ineffectiveness.

The chapters on ritual are of more solid value. The first deals with the use of libations of water for various purposes; it is partly polemical, being directed against Stange's views (*Hermes*, 1, 630 ff.), but not all of Dr. Keren's own opinions are improvements. The second handles a miscellaneous collection of points under the rubric 'Eukhrimasties und Fremdes in den Opfermysterium', including the attachment of gods and heroes to particular spots, the sacredness of boundaries, the reverence paid to the snake, and the exclusion of strangers and slaves from certain rites. Chapter III is devoted to the *Skolyra*, and advances an interesting parallel from a rite practised by the Arabs of the east of the sea of Tiberias to reconcile a murder with the rebellious of the murdered man. The explanation suggested for the practice is refreshingly simple; ignoring the suggestion that the woman wall for the shedding of the victim's kindred blood, and negating the traditional explanation (*Mon. f.*, 353) that the cry is an invitation to the god, Dr. Keren holds that the rite is intended, at the cubilation of the offering, to drive away the evil spirits which, attracted by the shedding of blood, might attack the women present at the sacrifice. The next chapter is a valuable monograph on ancient processions, concluding with a brief notice of the survival of certain of their characteristics in the ritual of the Catholic Church.

Throughout the work Dr. Keren remains faithful to his belief that the worship of the gods is derived from the respect shown to the dead. Thus the use of water in the worship of the gods goes back to the various forms to the ritual of death (pp. II, 12); even the washing of their statues is a reflex of the ceremonial purification of the body of the dead man. Gods is denied a primitive claim to worship; die is preceded by spirits of the dead (p. 27). It is not, therefore, surprising to find that even the horses offered to Hestia and the sacred oxen (pp. 136, 137) are suspected of derivation from a chthonian cult, but it is inexcusable to find a recognition of the conjunction in Hestia's throat in *Od.* xii. 385 to descent into the realm of Hades and shine among the dead. Poseidon also shares the fate of Hestia; we learn (p. 138) that his connection with the sea is not primitive; as lord of the souls of the dead he is lord of the depths of the ocean where lie the drowned, lord of the winds which they raise, and thence lord of the sea generally. The dark horses, with which according to Euripides (*Androm.*, 1011) Poseidon fares over the sea, are not, as even the scholiast knows, the horses of the sea-god, but chthonic in origin (p. 120); here as elsewhere the author ignores the weight of evidence as adduced, *cf.* in Farnell's *Culte of the Greek Gods* (iv. 5 ff., 20 ff.). Religion, in the author's view, is thus essentially related to the things of death, and is not even in part a reflex of the activities of life; a position which at the least ought not simply to be assumed.

A. H. K.

Hellenic Architecture: its Genesis and Growth. By EDWARD BELL. Pp. 180, with numerous illustrations. London: G. Bell and Sons, 1920. 7s. 6d.

This little book gives a summary of much of the latest information on the genesis of the Greek temple and of the orders, and attempts a more or less connected survey of their origin and development. The author derives the Greek temple in its main lines from the Mycenaean megaron and both Doric and Ionic from the Aegean column. He considers that the invaders from the North adapted for their own religious uses the style prevailing among the people they conquered. There are no traces of actual temples in the Aegean age but in palaces the wooden column was an important constructive element. This use of columns in the Aegean age—especially in Crete and Argolis—he thinks may be due originally to Egyptian influence, and the transition from wood to stone in the

Dorian period he also attributes to the same factor. We know, however, that some half-columns were already in use in the later Archaic period at Mycenae.

The development of the Ionic order out of the Aegean column he considers was the result of eastern and in particular of Hittite influence. Mr. Bell discusses the principal temples of both orders in relation to the development of the two styles and has a short chapter on the Corinthian order. The information on minor points is, in some cases, e.g. on reproduction, not quite up to date. The war has probably made this unavoidable. The main defect in the book is the inadequacy of the illustrations. The photographs, plans and drawings are mostly culled from well-known publications, reduced in size and badly printed. In some cases much needed illustrations are omitted. For instance, although such emphasis is laid on the influence of Egypt in the development of the Greek column no examples are given. Again, temples are described and not illustrated, e.g. that of Zeus at Agrigento.

On the whole the book hardly justifies its rather ambitious title although it contains useful information in a small compass.

Skizzenbuch griechischer Meister. Ein Einblick in das griechische Kunststudium auf Grund der Vasenbilder. By KARL REICHHOLD. Pp. 167, with 300 illustrations. Munich, Bruckmann, 1919. M. 15.

Professor Reichhold is well known as the author of the splendid drawings in Fortwängler and Reichhold's *Griechische Vasenmalerei*. He has also paid close attention to the technique of Greek vase-painting, and has published the result of his investigations in the same work. The present book is addressed to a larger public. The author believes that the study of the Greek system of drawing, as revealed by red-figured vases, has practical value; that the ancient method may serve as a basis for the training of the modern artist.

The ancient draughtsman was chiefly concerned with the rendering of the human figure, and of the human figure in typical forms. His early training was not based on direct study from nature. He began to learn drawing as we begin to learn writing, by practising certain elementary strokes, straight lines, pot-hooks and the like, until he was able to reproduce them easily and faithfully. He then proceeded to master the combination of these elements to render the different parts of the body, foot, hand, breast, face; and the combination of these parts, according to a prescribed system of proportion and symmetry, to make complete figures. The author illustrates this course of training by figures and details of figures, from vases, and traces the changes in drawing, and in the attitude of the draughtsman towards nature, from the time of Amphiokides to the end of the fourth century. There are good chapters on the rendering of the figure at rest and in motion, and a good study of Greek clothes and the representation of them. The numerous and charming illustrations are taken from vases which the author has drawn from Fortwängler-Reichhold; a good many of the drawings have not been published before, such as fig. 9 (Munich 2386); pl. 22, 2; pl. 28; pl. 31, 2; pl. 42, 3 and pl. 67, 4 from the Helen vase in the Vatican; pl. 45, 1; pl. 51; pl. 53, 1; pl. 56 from the Prometheus vase; fig. 50.

The author discusses, partly in the course of the argument, and partly in footnotes, a number of important archaeological questions: the use of the vase, the meaning of *enkrateia* and *tyche*, the relation between vase-painting and free painting, the size of the workshops. He considers that the painted vases are too fragile and too porous for everyday use; they were mainly ornaments, he thinks, but he admits a "temporary" use for household purposes. No doubt the conical were only used occasionally and cynnampetoi the others could easily be replaced. We may agree with him that they were not used for storage. That clay hydria went to the fountain is shown by Polyxenus's

broken hysteria. In the question of *conspira*, the author's view is akin to Mr. Pottier's: the *tyrannus* man becomes a very puny fellow, yet one would think that this view conflated with the main idea of Professor Reischhold's book.

What the artists will think of Professor Reischhold's system is uncertain: certain that the *Stich*—which is very welcome as one of the few good introductions to the study of vases.

Read *Witzburg* for Munich on p. 55, *Attic* for Italian on p. 93, *Vatican* for Berlin on p. 97, *Makron* for Bryn on p. 153.

Helps for Students of History—No. 36. Coins and Medals.—By G. F. HILL. Pp. 62. London: S.P.C.K., 1920. 1s. 6d.

The editors of this little series of elementary handbooks evidently realize that, if "archaeology without tears" is to be anything but a sham, they must secure the co-operation of the most highly qualified specialists. For coins and medals they have been particularly fortunate in enlisting the services of Mr. Hill. These introductory chapters—the last of them very brief—deal with the generalities of the subject in a manner at once lucid and interesting. These prepare the ground for what is undoubtedly the most important section of the whole, a carefully selected bibliography arranged mainly on geographical principles. The beginner will find there a valuable set of finger-gems, and even the expert may not infrequently be glad to consult himself of the hints that Mr. Hill has to offer. A great merit of the book is that it is world-wide in its reference, and that it includes modern as well as ancient and mediæval numismatics.

- (1) **The Lewes House Collection of Ancient Gems.** By J. D. BEASLEY. 4to. Pp. 211+124. Twelve collotype Plates. Oxford: Clarendon Press, 1920. 38s.
- (2) **Catalogue of Engraved Gems of the Classical Style.** By GISELA M. A. RICHTER. 8vo. Pp. lxxiv+232. 48 half-tone Plates. New York: Metropolitan Museum of Art, 1920. 5 dollars.

These two books are of interest as nearly simultaneous essays in the art of cataloguing. The collections with which they deal are both of modern formation, select in character, and of a manageable size.

Mr. Beasley deals with the choice collection of Mr. E. P. Warren at Lewes House. His book contains 135 entries only; and no introductions or sectional prefaces. On the other hand, each stone is discussed with the leisurely amplitude usually more characteristic of a special publication of an individual example than of a catalogue. The whole collection is illustrated in the first eight plates. Two more plates give the special pieces enlarged, and two give gems quoted in illustrations from elsewhere. This is a feature of interest, since all are notable stones. For example, Lord Southesk's beautiful archer feeling the point of his arrow (Pl. A, 10) can be compared with the fine Lewes House gem of an archer drawing his bow. The well-known Tyazkiewicz portrait head of a man in a bee-like cap can be conveniently compared with the formidable Zarif version of the same subject in the British Museum.

The collection of gems at New York is considerably larger, and Miss Richter's catalogue has 404 numbers. Her method is the more usual one of catalogue entries, for the most part concisely drawn up, with a useful introduction and sectional prefaces.

The nucleus of the collection was the group of mature archaic intaglios of the highest quality from Camala's excavations in Cyprus, first described by Mr. C. W. King in an appendix to Camala's book. It is noteworthy that no mention is made

of the mythical 'Treasure of Carum' to which they were originally said to belong. Numerically, the main constituents of the collection were the gems gathered together by Mr. King himself during the middle years of the last century. These pieces, when failure of eyesight obliged him to change his allegiance from gems to clams, he sold, about 1878, to Mr. J. T. Johnston, President of the New York Museum. The collection was given soon after to the Museum by Mr. Johnston. It contains a good selection of typical works, mainly Greek and Graeco-Roman, and is nearly free from the discredited examples that had been sought for at an earlier date. The Green collection of glass, given to the Museum by Mr. Morgan in 1917, contained a good variety of pastes. Other interesting pieces have been added by single purchase.

As in the case of Mr. Bunsen's catalogue, nearly all the gems are given in the plates, though a lack of plate references in the text makes it necessary to do some hunting to find them. The important objects are also shown in enlargements, but the method adopted of combining both impression and enlargement on the same rectangular tablet inevitably gives the no doubt erroneous impression that we have before us a photograph of the impression and of a mechanical enlargement of it, and not photographs of the same object on different scales. In all the plates both the casts and the tablets on which they rest are made to throw strong shadows to their left, and the arrangement, which is new, does not seem happy.

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HEAD OF PLATO



PORTRAIT BUST OF PLATO



HOLEHAM HALL



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